

PATENT ABSTRACTS OF JAPAN

AF

(11)Publication number : 10-052472

(43)Date of publication of application : 24.02.1998

(51)Int.Cl.

A61H 39/04

A61F 13/06

(21)Application number : 08-241005

(71)Applicant : TAKEUCHI KEIKO

OHATA TATSUO

OHATA MASAE

(22)Date of filing : 26.08.1996

(72)Inventor : TAKEUCHI KEIKO

(30)Priority

Priority number : 08181079

Priority date : 07.06.1996

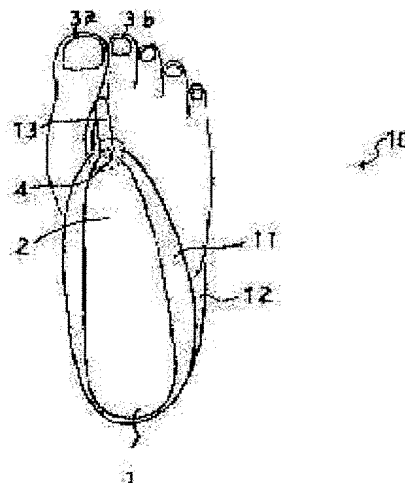
Priority country : JP

(54) SUPPORTER BANDS FOR FOOT AND POINT BETWEEN TOES

(57)Abstract:

PROBLEM TO BE SOLVED: To enable to recover, maintain and promote health by giving appropriate pointillage effect through pushing necessary points of the whole foot, to enable to use this set of supporter bands under enough permeability with effective absorption and odor prevention, to prevent and cure consequently athlete's foot and hallux valgus, to enable to use the supporter band for a long time under the firm installation of the supporter bands while wearing shoes, and to realize easy manufacturing through simple constitution.

SOLUTION: This set of supporter bands consists of an instep-side band 11, which closely rounds the positions from back of the heel 1 to a pair of adjacent toes 3a, 3b root of the instep 2 and is made of an elastic material at least partially, an foot-sole band 12, which closely rounds the positions from the back of the heel 1 to the toes 3a, 3b root of the foot-sole and is made of an elastic material at least partially, and a loop between the toes 3a, 3b, whose either end is connected to the instep-side band 11 at the toes 3a, 3b root and the other end is connected to the foot-sole band 12 at the toes 3a, 3b root.



LEGAL STATUS

[Date of request for examination]

19.01.1998

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

3182524

[Date of registration]

27.04.2001

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's
decision of rejection]

[Date of extinction of right]

(19) 日本国特許庁 (J P)

(12) 公開特許公報 (A)

(11) 特許出願公開番号

特開平10-52472

(43) 公開日 平成10年(1998) 2月24日

(51) Int.Cl. ⁶	識別記号	庁内整理番号	F I	技術表示箇所
A 6 1 H 39/04			A 6 1 H 39/04	P
A 6 1 F 13/06			A 6 1 F 13/06	M

審査請求 未請求 請求項の数 4 F D (全 12 頁)

(21) 出願番号 特願平8-241005

(22) 出願日 平成 8 年(1996) 8 月26日

(31) 優先権主張番号 特願平8-181079

(32) 優先日 平 8 (1996) 6 月 7 日

(33) 優先権主張国 日本 (J P)

(71) 出願人 596100890

竹内 恵子

神奈川県川崎市麻生区上麻生 2 丁目22番25号

(71) 出願人 596100904

大畑 達雄

神奈川県川崎市麻生区上麻生 2 丁目22番25号

(71) 出願人 596100915

大畑 政恵

神奈川県川崎市麻生区上麻生 2 丁目22番25号

(74) 代理人 弁理士 桜井 隆夫

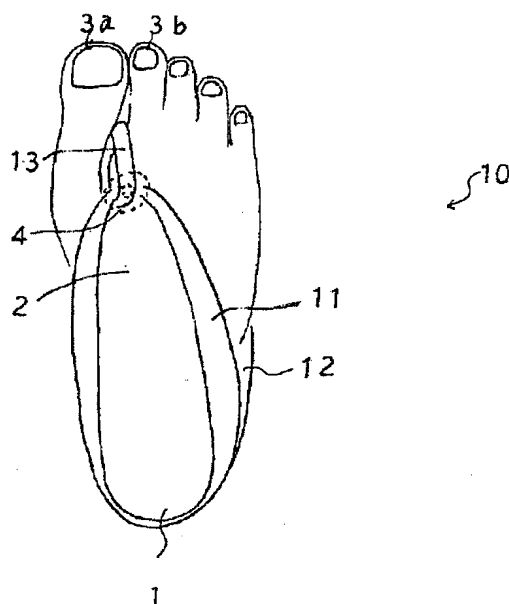
最終頁に続く

(54) 【発明の名称】 足及び足指間押圧サポータバンド

(57) 【要約】

【課題】 足全体の必要な部分を押圧して適度の指圧効果を与え健康の回復、維持、増進を図ることができるとともに、通気性がよく吸湿や防臭を効率よく行い水虫の予防や治療ができ、外反母趾の予防や治療に有効で、装着が確実で靴を履いても長時間使用でき、かつ構造が簡単で容易に製造できる足及び足指間押圧サポータバンドを提供する。

【解決手段】 足の踵1後部から甲2の足指3手前までを縦方向にびったりと巻回する少なくとも一部が伸縮性を有する甲側バンド部11と、足の踵1後部から足裏の足指3手前までを縦方向にびたりと巻回する少なくとも一部が伸縮性を有する足裏側バンド部12と、前記甲側バンド部11の足指3手前側に一端部が連結され、他端部が足指3間を通り前記足裏側バンド部12の足指3手前側に連結される足指間ループ部13とを備える。



【特許請求の範囲】

【請求項1】 足の踵後部から甲の足指手前までを縦方向にびったりと巻回する少なくとも一部が伸縮性を有する甲側バンド部と、足の踵後部から足裏の足指手前までを縦方向にびったりと巻回する少なくとも一部が伸縮性を有する足裏側バンド部と、前記甲側バンド部の足指手前側に一端部が連結され、他端部が足指間を通り前記足裏側バンド部の足指手前側に連結される足指間ループ部とを備えたことを特徴とする足及び足指間押圧サポータバンド。

【請求項2】 足の甲から足裏の土踏まずまでを横方向にびったりと巻回する少なくとも一部が伸縮性を有する横バンド部と、前記横バンド部の甲側の足指手前側に一端部が連結され、他端部が足指間を通り前記横バンド部の足裏側の足指手前側に連結される足指間ループ部とを備えたことを特徴とする足及び足指間押圧サポータバンド。

【請求項3】 足の甲から足裏の土踏まずまでを横方向にびったりと巻回する少なくとも一部が伸縮性を有する横バンド部と、前記横バンド部の甲側の足指手前側に一端部が連結され、他端部が足指間を通り前記横バンド部の足裏側の足指手前側に連結される足指間ループ部と、先端部側が前記横バンド部に連結され後部側が足の踵後部に掛けられる連結バンド部とを備えたことを特徴とする足及び足指間押圧サポータバンド。

【請求項4】 甲側の足指手前から足首手前までをほぼ3角形状に覆う甲側カバー部と、足裏側の足指手前から踵手前までをほぼ3角形状に覆う足裏側カバー部と、前記甲側カバー部及び足裏側カバー部の先端に連結され足指間を通る足指間ループ部と、前記甲側カバー部及び足裏側カバー部の後部側に連結され踵後部に掛けられる連結バンド部とを備えたことを特徴とする足及び足指間押圧サポータバンド。

【発明の詳細な説明】

【0001】

【発明の属する技術分野】本発明は、足指間及びその周辺、甲部分、踵、足裏などを押圧して刺激を与えるようにした足及び足指間押圧サポータバンドに関するものである。

【0002】

【従来の技術】従来、スポーツ、医療などで局部や関節などを保護するためにゴムを織り込んだ布製のバンドとして一般的なサポータが用いられている。また、例えば、健康サンダルと称し、サンダルの表面の全体に突起部を設けたものなどが市販されている。

【0003】一方、例えば、実公平7-7941号公報には、環状体の本体からなり、足指間の部分を環状方向と平行するように4本に分岐し、各足指を分岐した部分に通し、環状体をひねりながら踵部にかけるよう構成した足指間用サポーターに関する技術が開示されている。

このサポーターは、運動などにおいて、足指周辺部を刺激したり、各足指の動きを改善し、強化するための補助具として使用されるものである。

【0004】さらに、例えば、実公平3-2266号公報には、足指間に挟み込んで使用することにより、足指を悪臭や水虫が発生しにくい乾燥した清潔な条件下におくことができるようにした足指間の防臭乾燥具に関する技術が開示されている。

【0005】

【発明が解決しようとする課題】しかしながら、従来の一般的なサポータでは、一つの形態で足指間、足指の付け根、甲の部分、踵、あるいは足の裏などの足全体を同時に刺激して指圧効果を与えるものではなく、素材も厚手でありサポータ着用のまま靴を履いて外出用とするのは不向きであり、かつ夏季には着用すると暑く感じられることがある。健康サンダルは、大部分が踵を支える部分がないために、長時間履くとアキレス腱の下方に炎症を起こし易く、また突起部分が表面に出ているために夏季はその部分がべたつき、その上指の間の通気性を考慮していないために蒸れることもあり、あくまでもサンダルなので外出用としては不向きである。また、健康サンダルは、足裏のつばに的中するものがあることは認められているが、その中には外的なつばもあり血行を悪くすると言われている。

【0006】また、従来の足指間用サポータでは、その構成が一方に引っ張られるために足指間の柔らかい皮膚の部分が擦れたり皮が剥けるなどの擦り傷の原因になるおそれがあり、かつ集中的に締め付ける力が働き足指間に痛みが生じることがある。さらに、四本に分岐された一体構成となっているために、所望の足指間を選択することができず、装着したくない足指間も装着せざるを得ない状態となり、足指間にはめ込む形態となるために長時間の使用は困難となり、かつ足の裏及び甲の部分に突起部や隆起部がないために押圧効果は得られず、よって各足指の動きを改善することは難しい。

【0007】さらに、従来の足指間の防臭乾燥具では、足指間に挟み込み、その上から靴下などを履いて使用されるが、歩行中や走行中にずれてくるおそれがある。

【0008】そこで本発明は、足全体の必要な部分を押圧して適度の指圧効果を与え健康の回復、維持、増進を図ることができるとともに、通気性がよく吸湿や防臭を効率よく行い水虫の予防や治療ができ、外反母趾の予防や治療に有効で、装着が確実で靴を履いても長時間使用でき、かつ構造が簡単で容易に製造できる足及び足指間押圧サポータバンドを提供することを目的とする。

【0009】

【課題を解決するための手段】上記目的を達成するための本発明の足及び足指間押圧サポータバンドは、足の踵後部から甲の足指手前までを縦方向にびったりと巻回する少なくとも一部が伸縮性を有する甲側バンド部と、足

の踵後部から足裏の足指手前までを縦方向にびったりと巻回する少なくとも一部が伸縮性を有する足裏側バンド部と、前記甲側バンド部の足指手前側に一端部が連結され、他端部が足指間を通り前記足裏側バンド部の足指手前側に連結される足指間ループ部とを備えたものである。

【0010】また、本発明の他の足及び足指間押圧サポータバンドは、足の甲から足裏の土踏まずまでを横方向にびったりと巻回する少なくとも一部が伸縮性を有する横バンド部と、前記横バンド部の甲側の足指手前側に一端部が連結され、他端部が足指間を通り前記横バンド部の足裏側の足指手前側に連結される足指間ループ部とを備えたものである。

【0011】さらに、本発明の他の足及び足指間押圧サポータバンドは、足の甲から足裏の土踏まずまでを横方向にびたりと巻回する少なくとも一部が伸縮性を有する横バンド部と、前記横バンド部の甲側の足指手前側に一端部が連結され、他端部が足指間を通り前記横バンド部の足裏側の足指手前側に連結される足指間ループ部と、先端部側が前記横バンド部に連結され後部側が足の踵後部に掛けられる連結バンド部とを備えたものである。

【0012】また、本発明の他の足及び足指間押圧サポータバンドは、甲側の足指手前から足首手前までをほぼ3角形状に覆う甲側カバー部と、足裏側の足指手前から踵手前までをほぼ3角形状に覆う足裏側カバー部と、前記甲側カバー部及び足裏側カバー部の先端に連結され足指間を通る足指間ループ部と、前記甲側カバー部及び足裏側カバー部の後部側に連結され踵後部に掛けられる連結バンド部とを備えたものである。

【0013】

【発明の実施の形態】図1及び図2は本発明の第1実施形態の押圧サポータバンドを説明する図であり、図1は足に装着した押圧サポータバンドの平面図、図2は足に装着した押圧サポータバンドの裏面図である。

【0014】これらの図において、本第1実施形態の押圧サポータバンド10は、足の踵1後部から足の甲2側に巻回する甲側バンド部11と、足の踵1後部から足の裏側に巻回する足裏側バンド部12と、甲側バンド部11に一端部が連結され、他端部が足指3間を通り足裏側バンド部12の足指3手前側に連結される足指間ループ部13とから構成されている。

【0015】甲側バンド部11は、全体あるいは少なくとも一部が伸縮性を有する帯状体からリング状に形成され、足の踵1後部から足の表側の足指3手前の甲2部分を通りびたりと巻回されるものである。このような甲側バンド部11は、抗菌性及び吸湿性を有する綿、麻、絹、羊毛などの天然繊維、あるいはこれら天然繊維とナイロン、ポリエステル、ポリウレタン、アセテートなど化学繊維とを複合化した繊維から形成されることが好ま

しく、例えば、図3に示すように、第1の布11aの一方の表面に足の表面に接触して適度の刺激を与える凹凸が形成された第2の布11bを接着した構成にしてもよい。甲側バンド部11の伸縮性は、一般的なサポーターと同様に布製のバンドにゴムを織り込んでもよく、第4図に示すように、伸縮性及び弾力性を富ませるとともに通気性をよくし、かつ凹凸を有する編み目11c表面を足に接触させるようにしてもよい。甲側バンド部11は、靴下の下に着用し靴を履いて歩行や運動ができるように全体として薄手に形成してもよいが、厚手に形成して保温効果を持たせ冬季などに室内で着用できるようにしてもよい。また、甲側バンド部11は、その幅が一定でもよいが、踵1後部に巻回される部分を外れないように幅を広くし先端側を狭くしてもよく、リング状の大きさは足の大きさに合わせて面ファスナーなどで調整できるようにしてもよい。

【0016】足裏側バンド部12は、全体あるいは少なくとも一部が伸縮性を有する帯状体からリング状に形成され、足の踵1後部から足の裏側の足指3手前部分を通りびたりと巻回されるものである。このような足裏側バンド部12は、上記の甲側バンド部11と同様な各種繊維から形成され、同様な伸縮性、弾力性、通気性、抗菌性、吸湿性、表面の凹凸を有するものが好ましく、薄手あるいは厚手で幅も任意にできリング状の大きさも足の大きさに合わせて調整できることが好ましい。なお、図5に示すように、1つの大きなリング状バンドの帯状体を中央部で交差させて、甲側バンド部11及び足裏側バンド部12を構成し、その交差部分を踵1に巻回させるようにしてもよく、このようにすることで、バンド部の構成を簡単にすることができる。また、交差部分を1本の連結バンドにすれば、さらに薄くすることができる。

【0017】足指間ループ部13は、円形断面あるいは矩形断面の細い紐などでリング状に形成され、例えば、甲側バンド部11の足指3の手前側に一端部が足のつばである太衝4の位置で移動可能に連結され、他端部が足裏側バンド部12の足指3の手前側の足のつばである湧泉5の位置で連結され、中間部の2本の紐部分を一緒にして足指3の間（本実施形態では、第1足指3aと第2足指3bの間）を通り、甲側バンド部11と足裏側バンド部12の伸縮性により適宜な強さで引っ張られている。このような足指間ループ部13は、例えば、抗菌性及び吸湿性を有する上記の各種の繊維からなる紐状体で小さいリング状に形成されている。このリング状の大きさは、例えば、図6に示すように、紐の両端部側に設けられた面ファスナー14により足の大きさや引っ張り力などに合わせて調整可能になっていることが好ましい。また、足指間ループ部13は、図7及び図8に示すように、円筒状の紐からなり足指3の間を通る部分のみに中空の比較的弾力性、抗菌性及び通気性を有する筒状体15が収納され、足指3の間に挟み込まれるようになって

いてもよく、あるいは図9に示すように、足指3の間を通る部分に比較的小さく両端がやや拡径状に形成された同様な材料からなる筒状体15'を移動可能に装着し、足指3の間に挟み込まれるようになっていてもよい。また、他の形態の足指間ループ部13Aは、図10に示すように、帯状体の一部の中央部に弾力性を有する心材16を収納した材料から形成し、その心材16により足指3の間が適宜開くようにしてもよい。さらに、他の形態の足指間ループ部13Bは、図11に示すように、表面に凹凸を有する帯状体に形成し、足指3間を凹凸により刺激するようにしてもよい。また、足指間ループ部13は、小さいリングに紐を設け、リングを足指に通し紐をバンド部に連結するようにすれば薄手にすることができる。

【0018】上記構成の押圧サポータバンド10によれば、まず、装着するために、甲側バンド部11の後部側を踵1後部に掛け、先端側を足指3に近い甲側に巻回し、足裏側バンド部12の後部側を踵1の後部に掛け、先端側を足指3に近い足裏側に巻回し、甲側バンド部11及び足裏側バンド部12を足の表面にぴったり接触させ、かつ足指間ループ部13の2本の紐部分を一緒にして第1足指3a及び第2足指3b間に適度の引っ張り力を持たせて通す。

【0019】この押圧サポータバンド10を着用して歩行すると、甲側バンド部11及び足裏側バンド部12が踵1、甲2、足裏の各部分で適度に伸縮するため、足全体に指圧効果やマッサージ効果が得られ、足指間ループ部13が第1足指3a及び第2足指3b間で適度に伸縮するため、足指3の間や足指の付け根周辺を違和感なく指圧する効果が得られる。特に、バンド部やループ部の表面に凹凸を形成すれば足の表面を適宜刺激を与える。足指間ループ部13を第1足指3a及び第2足指3b間に通して挟むことは、従来の下駄や草履の鼻緒と同様の役目を果たすことになる。特に、この実施形態では、甲側バンド部11及び足裏側バンド部12と足指間ループ部13の連結部分が足のつばである太衝4と湧泉5に位置するため、伸縮作用によりつばに適度の刺激と押圧効果が得られる。また、足指間ループ部13は第1足指3a及び第2足指3b間を開かせることで、健康によく、かつ吸湿性及び通気性がよくなり、乾燥させ防臭や水虫防止を効率良く行うことができる。特に、足指間ループ部13に中空の比較的弾力性を有する小さい筒状体15を収納し、その筒状体15を足指3の間に挟み込むようにしたり、足指3の間に比較的小さく両端が拡径状に形成された筒状体15'を装着し、その筒状体15'を足指3間に挟み込むようにしたり、さらには、足指間ループ部13Aのように中央部に弾力性を有する心材16を収納し、その心材16を足指3の間に挟み込むようにすれば、足指3の間が適宜開き、通気性をさらに良くすることができ、外反母趾の予防や治療にも有効である。こ

の押圧サポータバンド10を全体として薄手に形成すれば、常時着用することが可能で、歩行時、運動時、就業時あるいは学習時などにおいて無意識の内に健康回復、維持、増進などの効果が期待でき、厚手に形成し保温効果を持たせればそのまま室内で着用することができ、また足全体を支えているために円滑に歩行でき血液循環をよくし、姿勢の矯正にもよい。さらに、押圧サポータバンド10を着用すれば、その伸縮性により足底の筋力をつけ、かつ肝機能及び内蔵の諸機能を高めることができる。

【0020】図12及び図13は本発明の第1実施形態の押圧サポータバンドの他の使用形態を説明する図であり、図12は足に装着した押圧サポータバンドの平面図、図13は足に装着した押圧サポータバンドの裏面図である。

【0021】この使用形態では、足指間ループ部13のリング状の紐を第1足指3aと第2足指3bの間及び第2足指3bと第3足指3cの間を通したもので、その他の構成は第1実施形態と同様である。この足指間ループ部13により、足指3a、3b、3cの間を適宜開き、健康によく、かつ吸湿性及び通気性がよくなり、乾燥させ防臭や水虫防止を効率良く行うことができ、外反母趾の予防と治療をすることができる。

【0022】図14及び図15は本発明の第2実施形態の押圧サポータバンドを説明する図であり、図14は足に装着した押圧サポータバンドの平面図、図15は足に装着した押圧サポータバンドの裏面図である。

【0023】この第2実施形態の押圧サポータバンド20は、甲側バンド部11と足裏側バンド部12に連結され、足指3の間を通る2つの足指間ループ部13、13'を備え、その他の構成は第1実施形態と同様である。一方の足指間ループ部13は、2本の紐部分を一緒にして第1足指3aと第2足指3bの間を通し、他方の足指間ループ部13'は、第2足指3bと第3足指3cとの間及び第3足指3cと第4足指3dの間を通している。足指間ループ部13、13'により、第1足指3aと第2足指3b、第2足指3bと第3足指3c、第3足指3cと第4の足指3dの間を適宜開き、健康によく、かつ吸湿性及び通気性がよくなり、乾燥させ防臭や水虫防止を効率良く行うことができる。

【0024】図16及び図17は本発明の第2実施形態の押圧サポータバンドの他の使用形態を説明する図であり、図16は足に装着した押圧サポータバンドの平面図、図17は足に装着した押圧サポータバンドの裏面図である。

【0025】この使用形態では、足指間ループ部13、13'のリング状の紐を第1足指3aと第2足指3bの間、第2足指3bと第3足指3cの間、第3足指3cと第4足指3dの間、第4足指3dと第5足指3eの間を通したもので、その他の構成は第2実施形態と同様であ

る。足指間ループ部13, 13'により、全ての足指3a, 3b, 3c, 3d, 3eの間を適宜開き、健康によく、かつ吸湿性及び通気性がよくなり、乾燥させ防臭や水虫防止を効率良く行うことができる。すなわち、第2実施形態の押圧サポータバンド20では、2つの足指間ループ部13, 13'が設けられていることで、紐部分を1本にしたり合わせたりすることで、必要に応じて足指3の間を選択して通すことができる。特に、女性のハイヒールのように足の先端の部分に負担をかけたり、先の細い靴の着用により第3足指から第5足指の間が少しずつ重なり合うこともあるが、足指間ループ13, 13'を通すことによりその予防効果を期待することができる。なお、足指間ループ13, 13'は、足指3の任意の間に通すことができる。

【0026】第2実施形態の押圧サポータバンド20において、図18及び図19に示すように、足指間ループ部13, 13'を足の太衝4及び湧泉5近傍で小さな磁性片またはスナップ21等を設けて連結あるいは縫着すれば、太衝4及び湧泉5を磁気作用や適宜の刺激により血行をよくすることができる。また、同様に第2実施形態の押圧サポータバンド20において、図20及び図21に示すように、甲側バンド部11及び足裏側バンド部12の先端側を太衝4及び湧泉5の近傍でリング状に形成し、このリング部分に足指間ループ部13, 13'を通すようにすれば、太衝4及び湧泉5の近傍から足指間ループ部13, 13'がずれることなく押圧力を高めることができる。

【0027】また、第2実施形態の押圧サポータバンド20において、図22に示すように、足指間ループ部13, 13'の足指の付け根近傍の位置に小さい突起部22を設けたものである。この突起部22は、弾力性、柔軟性、吸湿性を有する材料からなり、リング状のものを通したり、あるいは凸状に形成されたものを接着又は縫着することで設ける。このような突起部22により、足指の付け根のつばが刺激され、特に目の疲労等に効果がある。

【0028】図23及び図24は本発明の第3実施形態の押圧サポータバンドであり、図23は足に装着した押圧サポータバンドの裏面図、図24は突起部の拡大断面図である。なお、前記実施形態に対応する部分は同一の符号を記す(以下の実施形態も同様とする)。

【0029】この第3実施形態の押圧サポータバンド30は、足裏側バンド部12と足指間ループ部13の湧泉5近傍の連結部分と足裏側バンド部12の足の土踏まず6の位置に突起部31を設けたものであり、その他の構成は第1実施形態と同様である。この突起部31は、足の表面に接触する側の足裏側バンド部12の表面にファスナーの被着が可能な起毛状の布地32を接着または縫着し、この布地32に面ファスナー33を接着した突起物34を被着する。このような突起物34は、弾力性、

抗菌性、吸湿性を有する布やゴム等の材料が使用される。

【0030】上記構成の押圧サポータバンド30によれば、湧泉5あるいは足の土踏まず6近傍に突起部31が設けられているため、足のつばを効果的に刺激することができ、かつ面ファスナー33により着脱自在に使用することができ、さらに突起物38a, 38bにより高さ調整ができる。

【0031】図25、図26及び図27は第3実施形態の押圧サポータバンドの突起部の他の例を説明している。図25に示す突起部35は、中央部が段部状に形成された突起物36が面ファスナー33により布地32を介して足裏側バンド部12の皮膚側表面に取り付けられている。この突起物36により足のつばを効果的に刺激することができる。また、図26に示す突起部37は、図25の突起物36の上に表面に凹凸が形成された突起物38aが着脱自在に取り付けられるようになっている。この突起物38aにより足のつばを選択して効果的に刺激することができる。図27に示す突起部39は、図25の突起物36の上に表面に凹凸が形成された突起物38bが着脱自在に取り付けられるようになっている。この突起物38bにより足のつばを選択して効果的に刺激することができる。

【0032】図28は本発明の第4実施形態の押圧サポータバンドを足に装着した状態を説明する斜視図である。

【0033】この押圧サポータバンド40は、第1実施形態と同様のバンド部11を面ファスナー41により長さ調整できるようにするとともに、足に接触する側の表面に薄手でソフトな突起部42を取り付けたものである。

【0034】この押圧サポータバンド40では、甲側バンド部11を面ファスナー41により長さ調整することができるため、装着が容易になり、かつ突起部42により足の甲2側のつばを効果的に刺激することができる。

【0035】図29は本発明の第5実施形態の押圧サポータバンドを足に装着した状態の平面図である。

【0036】この押圧サポータバンド50は、第1実施形態と同様のバンド部11の足に接触する側の表面に磁化された線状体51が設けられたものである。

【0037】この押圧サポータバンド50では、磁化された線状体51の磁気効果により甲側の足の血行を良くすることができる。

【0038】図30は本発明の第6実施形態の押圧サポータバンドを足に装着した状態の平面図である。

【0039】この押圧サポータバンド60は、第1実施形態と同様のバンド部11に縁にレース状布61が取り付けられ、さらに足指間ループ部13との連結部側にリボン62を取り付けたものである。このレース状布61やリボン62は、女性用としてファッション性を持た

せ、色彩も多彩にすることが好ましい。このレース状布62を取り付ける替わりにバンド部自体の織り方や編み方の模様に変化を付けるようにしてもよい。

【0040】この押圧サポータバンド60では、レース布61やリボン62が設けられているため、女性用のファッション性あるものとしてそのまま室内で着用することもできる。

【0041】図31及び図32は本発明の第7実施形態の押圧サポータバンドであり、図31は足に装着した押圧サポータバンドの平面図、図32は足に装着した押圧サポータバンドの裏面図である。

【0042】この押圧サポータバンド70は、第1実施形態と同様の甲側バンド部11を足の横の周囲を巻回するようにしたもので、そのために、足裏の前側に甲側バンド部11の2ヶ所を横方向に連結した連結バンド71を設けたものである。

【0043】この押圧サポータバンド70では、甲側バンド部11を足の横の周囲を巻回させることで、ハイヒールを履いて装着した場合、外観から甲側バンド部11が見えないようにでき、かつその近傍の足を刺激することができ、連結バンド71が増えることで装着が確実に行われる。

【0044】図33及び図34は本発明の第8実施形態の押圧サポータバンドであり、図33は足に装着した押圧サポータバンドの平面図、図34は足に装着した押圧サポータの裏面図である。

【0045】この押圧サポータバンド80は、足の甲2から足裏の土踏まず6を横方向にびったりと巻回する伸縮性を有する横バンド部81と、この横バンド部81の甲2側の足指3手前側に一端部が移動可能に連結され、他端部が足指3間を通り横バンド部81の足裏側の足指3手前側に連結される足指間ループ部82とから構成されている。横バンド部81は、前記各実施形態で説明したバンド部と同様な各種の材料で形成され、足指間ループ部82も同様な材料で形成され、それぞれ適宜凹凸や突起部が形成される。そして、足指間ループ部82は、第1足指3aと第2足指3b及び第2足指3bと第3足指3c間に通されている。なお、横バンド部81は、図35に示すように面ファスナー83を設けて足の大きさに合わせて調整自在になってもよい。また、横バンド部81は、外れないように横方向に2重に巻回するようにしてもよい。

【0046】この押圧サポータバンド80は、横バンド部81及び足指間ループ部82により上記に説明したと同様に作用し足全体の必要な部分を押圧して適度の指圧効果を与え健康の回復、維持、増進を図ることができる。とともに、通気性がよく吸湿や防臭を効率よく行い水虫の予防、治療ができ、装着が確実で靴を履いても長時間使用できる。また、この実施形態では、横バンド部81及び足指間ループ部82で構成されるため、構造が簡単

で容易に製造でき、装着も簡単になる。

【0047】図36は本発明の第9実施形態の足に装着した押圧サポータバンドの平面図である。

【0048】この押圧サポータバンド90は、横バンド部81の甲側の手前に2ヶ所の凹部状の係入部81a、81aが形成され、この係入部81a、81aにそれぞれ足指間ループ部82、82'が掛けられ、足指3a、3b、3c、3d、3e間を通して足裏で横バンド部81で連結されている。

【0049】この押圧サポータバンド90では、前記各実施形態と同様に作用する他、足指間ループ部82、82'が横バンド部81の2ヶ所の凹部状の係入部81a、81aに掛けられているため、位置が確定しづれることがなくなる。

【0050】なお、第9実施形態の押圧サポータバンド90は、図37に示すように、凹部状の係入部81a、81aの替わりに、横バンド部81の甲側にスリット状の係入部81b、81bを形成し、この係入部81b、81bにそれぞれ足指間ループ部82、82'を掛けるようにしてもよい。

【0051】図38は本発明の第10実施形態の足に装着した押圧サポータバンドの斜視図である。

【0052】この押圧サポータバンド100は、第9実施形態と同様に形成された横バンド部81と足指間ループ部82に、さらに後部側が踵1の後部側に巻回され、前部側の端部が甲2の上部で横バンド部81に縫着等により連結された連結バンド部101が設けられたものである。

【0053】この押圧サポータバンド100では、連結バンド部101が設けられているため、装着が確実になり外れることがなくなる。

【0054】図39及び図40は本発明の第11実施形態の押圧サポータバンドであり、図39は足に装着した押圧サポータバンドの平面図、図40は足に装着した押圧サポータバンドの裏面図である。

【0055】この押圧サポータバンド110は、足の甲側の足指手前から足首手前までを足の形状に合わせてびったりと覆うほぼ3角形状に形成した甲側カバー部111と、足裏の足指手前から踵手前までをびたりと覆うほぼ3角形状に形成した足裏側カバー部112と、甲側カバー部111の先端部と足裏側カバー部112の先端部に連結され、足指3間を通る足指間ループ部113と、甲側カバー部111と足裏側カバー部112の後端部(左及び右)同士に連結され、足の踵1の後部の巻回される連結バンド部114とから構成されている。甲側カバー部111と足裏側カバー部112は、ある程度形状が維持される弾力性、抗菌性及び柔軟性の有する材料からなり、通気性がよいメッシュ状の材料で形成することが好ましい。足指間ループ部113及び連結バンド部114は、上記実施形態で説明した材料等で同様に形成

される。また、足指間ループ部113は、足指3の間に通すように複数個設けてもよく、1本の紐で複数の足指3の間に通すようにしてもよい。さらに、甲側カバー部111と足裏側カバー部112の内面には適宜凹凸や突起部が形成され、足の表面やつばを刺激したり、指圧効果が得られるようにする。

【0056】この押圧サポータバンド110では、上記各実施形態と同様に作用し足全体の必要場な部分を押圧して適度の指圧効果を与え健康の回復、維持、増進を図ることができるとともに、通気性がよく吸湿や防臭を効率よく行い水虫の予防、治療ができ、装着が確実に靴を履いても長時間使用できる。また、この実施形態では、甲側カバー部111、足裏側カバー部112で足が覆われ、連結バンド部114で連結されるため、装着が確実に外れることがなくなる。

【0057】本発明の好適な実施形態について説明したが、本発明の精神を逸脱しない範囲内において種々の改良及び変更をなし得ることはもちろんである。

【0058】

【発明の効果】以上説明したように本発明の足及び足指間の押圧サポータバンドによれば、足全体の必要場な部分を押圧して適度の指圧効果を与え健康の回復、維持、増進を図ることができるとともに、通気性がよく吸湿や防臭を効率よく行い水虫の予防、治療ができ、また外反母趾の予防や治療に有効で、装着が確実に靴を履いても長時間使用でき、かつ構造が製造が簡単で容易に製造できる

【図面の簡単な説明】

【図1】本発明の第1実施形態の押圧サポータバンドの足に装着した状態の平面図である。

【図2】本発明の第1実施形態の押圧サポータバンドの足に装着した状態の裏面図である。

【図3】本発明の第1実施形態の甲側バンド部の断面図である。

【図4】本発明の第1実施形態の甲側バンド部の編み目を示す図である。

【図5】本発明の第1実施形態の甲側バンド部及び足裏側バンド部を1つのバンドで構成した図である。

【図6】本発明の第1実施形態の足指間ループ部を調整自在にした図である。

【図7】本発明の第1実施形態の足指間ループ部に筒状体を収納した図である。

【図8】図7の筒状体を収納した足指間ループ部の拡大断面図である。

【図9】本発明の第1実施形態の足指間ループ部に筒状体を設けた図である。

【図10】本発明の第1実施形態の他の足指間ループ部の断面図である。

【図11】本発明の第1実施形態のさらに他の足指間ループ部の断面図である。

【図12】本発明の第1実施形態の押圧サポータバンドの足に装着した他の使用状態の平面図である。

【図13】本発明の第1実施形態の押圧サポータバンドの足に装着した他の使用状態の裏面図である。

【図14】本発明の第2実施形態の押圧サポータバンドの足に装着した状態の平面図である。

【図15】本発明の第2実施形態の押圧サポータバンドの足に装着した状態の裏面図である。

【図16】本発明の第2実施形態の押圧サポータバンドの足に装着した他の使用状態の平面図である。

【図17】本発明の第2実施形態の押圧サポータバンドの足に装着した他の使用状態の裏面図である。

【図18】本発明の第2実施形態の足指間ループ部にスナップを設けた平面図である。

【図19】本発明の第2実施形態の足指間ループ部にスナップを設けた裏面図である。

【図20】本発明の第2実施形態の甲側バンド部にリングを設けた平面図である。

【図21】本発明の第2実施形態の足裏側バンド部にリングを設けた裏面図である。

【図22】本発明の第2実施形態の足指間ループ部に突起部を設けた裏面図である。

【図23】本発明の第3実施形態の押圧サポータバンドの足に装着した他の使用状態の裏面図である。

【図24】本発明の第3実施形態の押圧サポータバンドの突起部の拡大断面図である。

【図25】本発明の第3実施形態の押圧サポータバンドの他の突起部の拡大断面図である。

【図26】本発明の第3実施形態の押圧サポータバンドの他の突起部の拡大断面図である。

【図27】本発明の第3実施形態の押圧サポータバンドの他の突起部の拡大断面図である。

【図28】本発明の第4実施形態の押圧サポータバンドの足に装着した状態の斜視図である。

【図29】本発明の第5実施形態の押圧サポータバンドの足に装着した状態の平面図である。

【図30】本発明の第6実施形態の押圧サポータバンドの足に装着した状態の平面図である。

【図31】本発明の第7実施形態の押圧サポータバンドの足に装着した状態の平面図である。

【図32】本発明の第7実施形態の押圧サポータバンドの足に装着した状態の裏面図である。

【図33】本発明の第8実施形態の押圧サポータバンドの足に装着した状態の平面図である。

【図34】本発明の第8実施形態の押圧サポータバンドの足に装着した状態の裏面図である。

【図35】本発明の第8実施形態の押圧サポータバンドの横バンド部を調整自在にした裏面図である。

【図36】本発明の第9実施形態の押圧サポータバンドの足に装着した状態の平面図である。

【図37】本発明の第9実施形態の押圧サポータバンドの他の横バンドを示す足に装着した状態の平面図である。

【図38】本発明の第10実施形態の押圧サポータバンドの足に装着した状態の斜視図である。

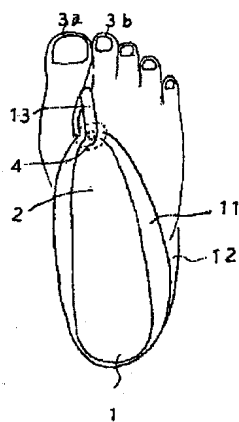
【図39】本発明の第10実施形態の押圧サポータバンドの足に装着した状態の平面図である。

【図40】本発明の第10実施形態の押圧サポータバンドの足に装着した状態の裏面図である。

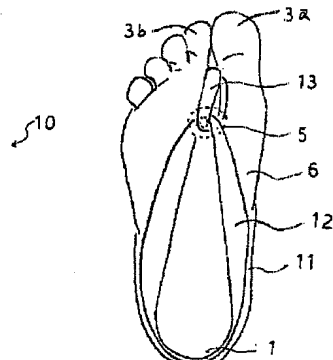
【符号の説明】

- | | |
|-----------------|----------------------|
| 1 踵 | 31, 35, 37, 39 突起部 |
| 2 甲 | 32 布地 |
| 3 足指 | 33 面ファスナー |
| 4 太衝 | 34, 36, 38a, 38b 突起物 |
| 5 湧泉 | 40 押圧サポータバンド |
| 6 土踏まず | 41 面ファスナー |
| 10 押圧サポータバンド | 42 突起部 |
| 11, 11' 甲側バンド部 | 50 押圧サポータバンド |
| 12 足裏側バンド部 | 51 線状体 |
| 13, 13' 足指間ループ部 | 60 押圧サポータバンド |
| 14 面ファスナー | 61 レース状布 |
| 15, 15' 筒状体 | 62 リボン |
| 16 心材 | 70 押圧サポータバンド |
| 20 押圧サポータバンド | 71 連結バンド |
| 21 スナップ | 80 押圧サポータバンド |
| 22 突起部 | 81 横バンド部 |
| 30 押圧サポータバンド | 81a, 81b 係入部 |
| | 82, 82' 足指ループ部 |
| | 83 面ファスナー |
| | 90 押圧サポータバンド |
| | 100 押圧サポータバンド |
| | 101 連結バンド部 |
| | 110 押圧サポータバンド |
| | 111 甲側カバー部 |
| | 112 足裏側カバー部 |
| | 113 足指間ループ部 |
| | 114 連結バンド部 |

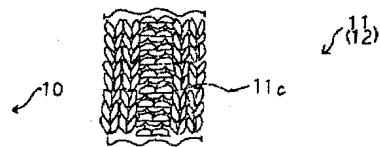
【図1】



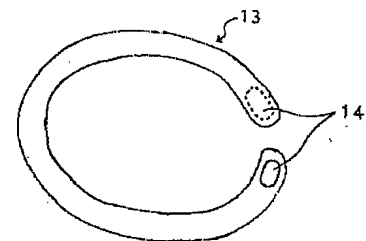
【図2】



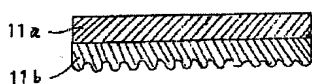
【図4】



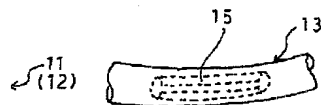
【図6】



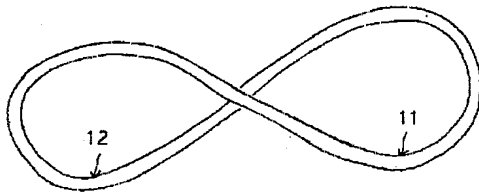
【図3】



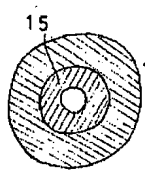
【図7】



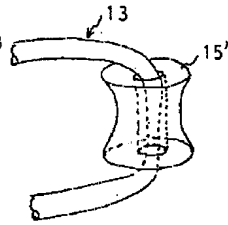
【図5】



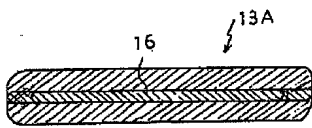
【図8】



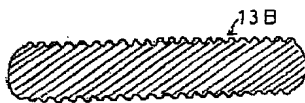
【図9】



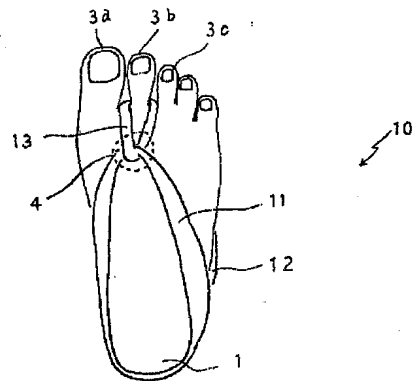
【図10】



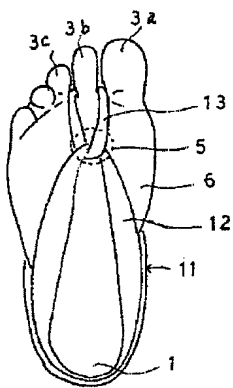
【図11】



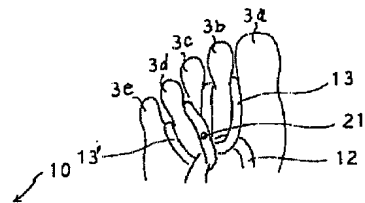
【図12】



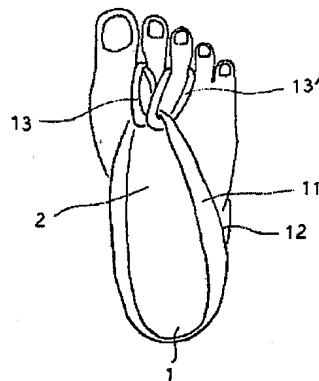
【図13】



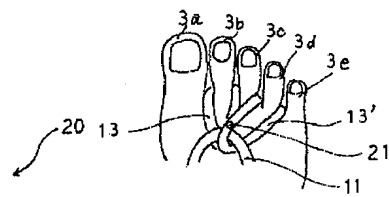
【図19】



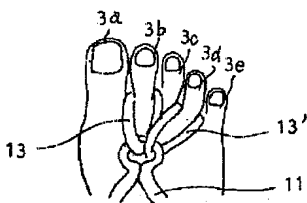
【図14】



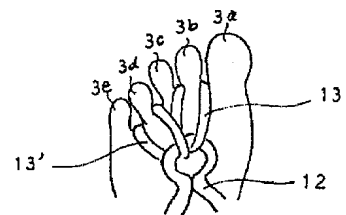
【図18】



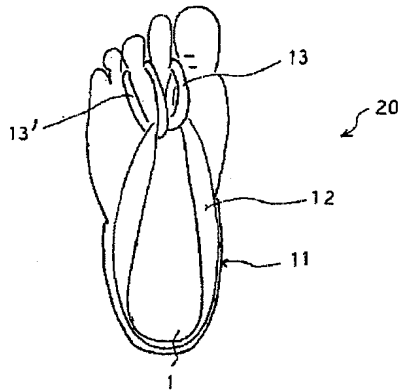
【図20】



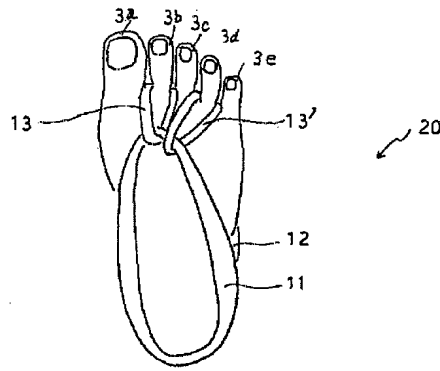
【図21】



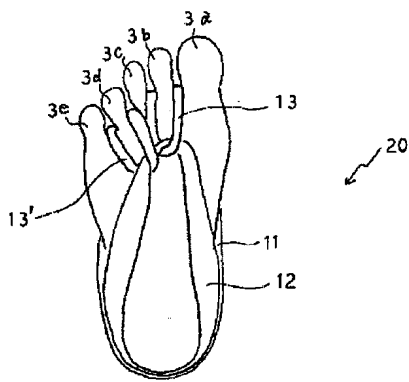
【図15】



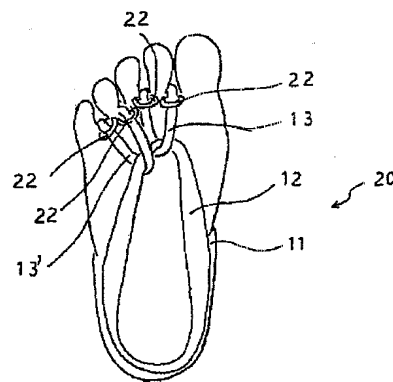
【図16】



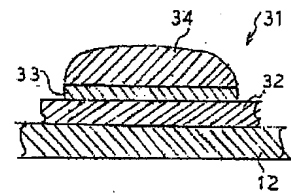
【図17】



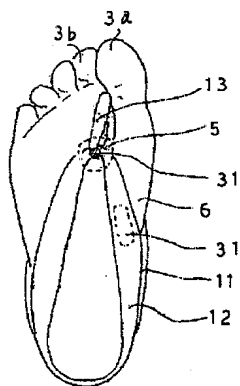
【図22】



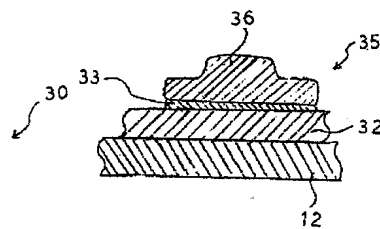
【図24】



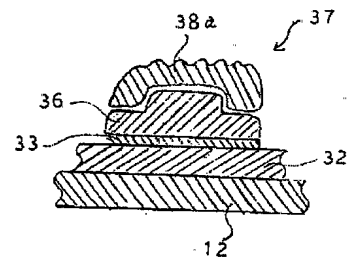
【図23】



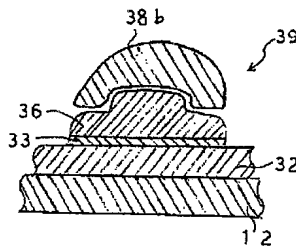
【図25】



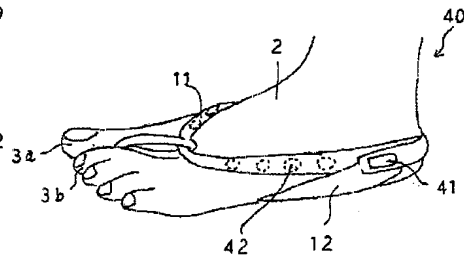
【図26】



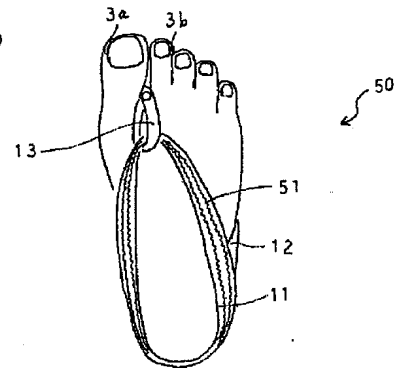
【図27】



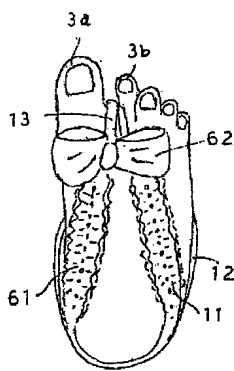
【図28】



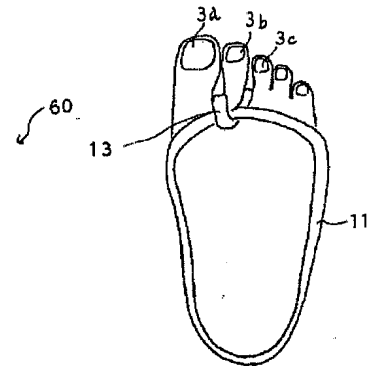
【図29】



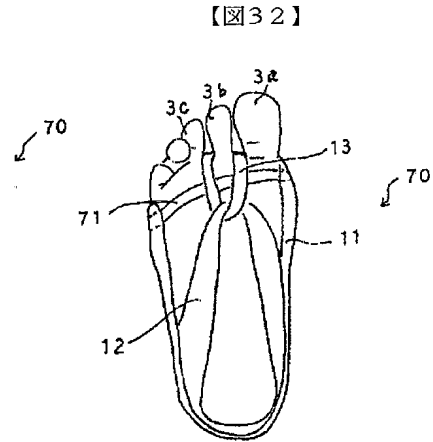
【図30】



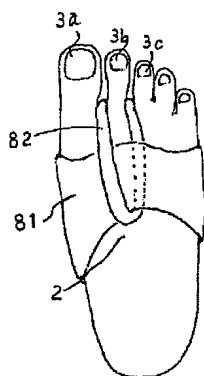
【図31】



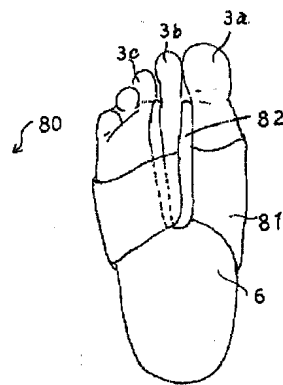
【図32】



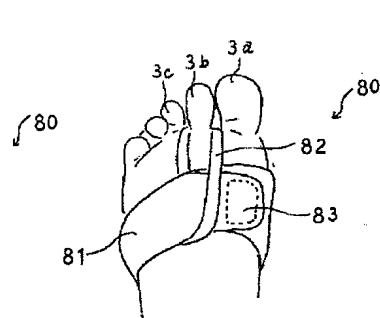
【図33】



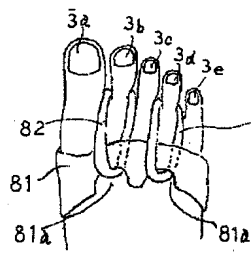
【図34】



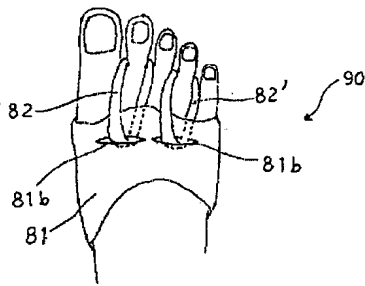
【図35】



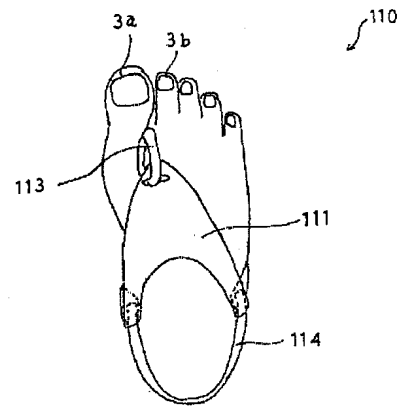
【図36】



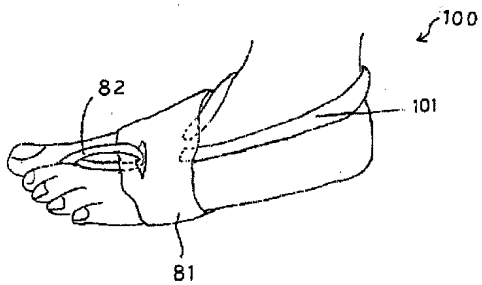
【図37】



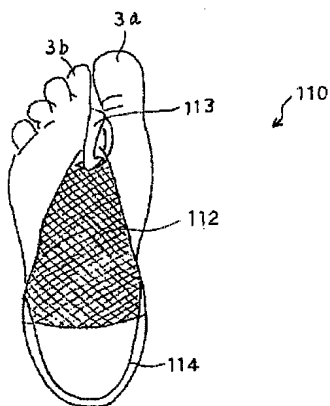
【図39】



【図38】



【図40】



フロントページの続き

(72)発明者 竹内 恵子
神奈川県川崎市麻生区上麻生2丁目22番25
号

* NOTICES *

JPO and INPIT are not responsible for any damages caused by the use of this translation.

- 1.This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.**** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

CLAIMS

[Claim(s)]

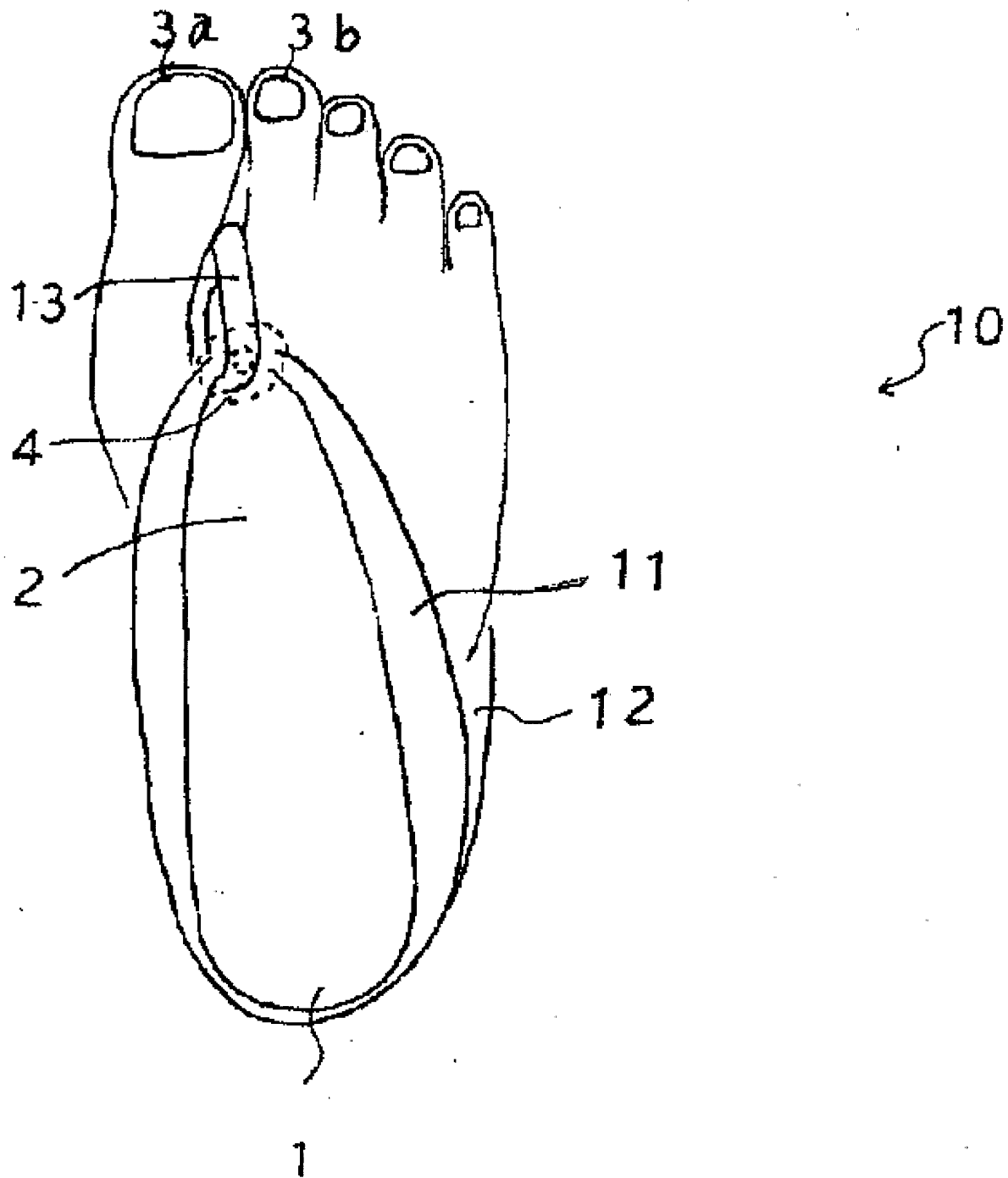
[Claim 1] the toe of the heel posterior part of a guide peg to a shell -- at least the part which winds even this side around a lengthwise direction exactly with the shell side band section which has elasticity the toe of the heel posterior part of a guide peg to the sole -- at least the part which winds even this side around a lengthwise direction exactly with the guide-peg background band section which has elasticity the toe of said shell side band section -- the end section connects with a near side -- having -- the other end -- a toe -- between -- a passage -- the toe of said guide-peg background band section -- the toe connected with a near side -- the guide peg characterized by having the between loop-formation section, and a toe -- a between press supporter band.

[Claim 2] the toe by the side of the shell of the horizontal band section in which at least the part which winds exactly from the shell of a guide peg to the arch of foot of the sole around a longitudinal direction has elasticity, and said horizontal band section -- the end section connects with a near side -- having -- the other end -- a toe -- between -- a passage -- the toe on the guide-peg background of said horizontal band section -- the toe connected with a near side -- the guide peg characterized by having the between loop-formation section, and a toe -- a between press supporter band.

[Claim 3] The horizontal band section in which at least the part which winds exactly from the shell of a guide peg to the arch of foot of the sole around a longitudinal direction has elasticity, the toe by the side of the shell of said horizontal band section -- the end section connects with a near side -- having -- the other end -- a toe -- between -- a passage -- the toe on the guide-peg background of said horizontal band section -- the toe connected with a near side -- with the between loop-formation section the guide peg characterized by having the connection band section by which a point side is connected with said horizontal band section, and a posterior part side is hung on the heel posterior part of a guide peg, and a toe -- a between press supporter band.

[Claim 4] the toe by the side of a shell -- from this side to ankle this side with the wrap shell side covering section in the shape of about 3 square shapes the toe on a guide-peg background -- from this side to heel this side with the wrap guide-peg background covering section in the shape of about 3 square shapes it connects at the tip of said shell side covering section and the guide-peg background covering section -- having -- a toe -- the toe passing through between -- the guide peg characterized by having the between loop-formation section and the connection band section which is connected with the posterior part side of said shell side covering section and the guide-peg background covering section, and is hung on a heel posterior part, and a toe -- a between press supporter band.

[Translation done.]



* NOTICES *

JPO and INPIT are not responsible for any damages caused by the use of this translation.

- 1.This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.**** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]
[Field of the Invention] this invention -- a toe -- the guide peg which presses a part for between and its circumference, and a back, the heel, the sole, etc., and gave the stimulus, and a toe -- it is related with a between press supporter band.

[0002]
[Description of the Prior Art] In order to protect a part, a joint, etc. by the sport, medicine, etc. conventionally, the general supporter as a band made of cloth which wove in rubber is used. Moreover, for example, health sandals are called and what prepared the height on the surface of [whole] sandals is marketed.

[0003] on the other hand -- JP,7-7941,Y -- from the body of an annular solid -- becoming -- a toe -- parallel to the annular direction in the part of a between -- as -- four -- branching -- each -- the toe constituted so that it might apply to a heel, twisting through and an annular solid into the part which branched the toe -- the technique about the supporter for between is indicated. this supporter -- movement etc. -- setting -- a toe -- stimulating a periphery **** -- each -- it is used as an auxiliary implement for improving and strengthening a motion of a toe.

[0004] furthermore -- JP,3-2266,Y -- a toe -- the toe in which Lycium chinense was made to grow by using it, putting in between in the bottom of the dry clean condition on which neither an offensive odor nor athlete's foot can generate a toe easily -- the technique about the deodorization desiccation implement of a between is indicated.

[0005]
[Problem(s) to be Solved by the Invention] however -- the conventional general supporter -- one gestalt -- a toe -- it may sense hot, when it is unsuitable for there to be nothing that stimulates the whole guide peg, such as a flesh side of the root of a toe, the part of a shell, the heel, or a guide peg, to coincidence, and gives the acupressure effectiveness in between, and for a material to be also thick, to wear shoes with supporter wear, and to carry out to going out and it wears in a summer Since the part is sticky since it was easy to cause inflammation under the Achilles tendon and the projection part has come out to the front face if it wears for a long time, since health sandals do not have the part into which most supports the heel, and they are not taking into consideration the permeability between the upper finger, and they are steamed, and summers are sandals to the last, they are unsuitable as an object for going out. Moreover, an irrelevant end crater is also in it and, if the worst happens, health sandals are said in circulation, although it is admitted that there are some which hit the end crater of the sole.

[0006] moreover, the conventional toe -- since the configuration is pulled by the one direction in the supporter for between -- a toe -- the part of the soft skin of a between has ground enough, and there is a possibility of becoming the cause of an abrasion, like a hide being stripped, and a pain may arise [the force bound tight intensively] between working length fingers Between cannot be chosen. since [furthermore,] it really which branched to four has composition -- a desired toe -- a toe not to equip -- the condition that it cannot but equip also with between -- becoming -- a toe -- since use of long duration becomes difficult since it becomes the gestalt inserted in in between, and there is neither a height nor a ridge in the flesh side of a guide peg, and the part of a shell, the press effectiveness is acquired -- not having -- therefore -- each -- it is difficult to improve a motion of a toe.

[0007] furthermore, the conventional toe -- the deodorization desiccation implement of a between -- a toe -- it puts in between, and although socks etc. are used from on the, wearing, there is a possibility of shifting during a walk and transit.

[0008] then, the guide peg it can use for a long time, and structure is easy, and it can manufacture easily even if permeability is good, prevention and the therapy of deed athlete's foot can do moisture absorption and deodorization efficiently, and it is effective to prevention and the therapy of hallux valgus, and it is certain and wearing wears shoes while this invention can press the part which needs the whole guide peg, can give the moderate acupressure

effectiveness and being able to aim at recovery of health, maintenance, and improvement and a toe -- it aims at offering a between press supporter band.

[0009] [Means for Solving the Problem] the guide peg of this invention for attaining the above-mentioned purpose, and a toe -- a between press supporter band the toe of the heel posterior part of a guide peg to a shell -- at least the part which winds even this side around a lengthwise direction exactly with the shell side band section which has elasticity the toe of the heel posterior part of a guide peg to the sole -- at least the part which winds even this side around a lengthwise direction exactly with the guide-peg background band section which has elasticity the toe of said shell side band section -- the end section connects with a near side -- having -- the other end -- a toe -- between -- a passage -- the toe of said guide-peg background band section -- the toe connected with a near side -- it has the between loop-formation section.

[0010] moreover, other guide pegs of this invention and a toe -- the toe by the side of the shell of the horizontal band section in which at least the part by which a between press supporter band winds exactly from the shell of a guide peg to the arch of foot of the sole around a longitudinal direction has elasticity, and said horizontal band section -- the end section connects with a near side -- having -- the other end -- a toe -- between -- a passage -- the toe on the guide-peg background of said horizontal band section -- the toe connected with a near side -- it has the between loop-formation section.

[0011] furthermore, other guide pegs of this invention and a toe -- a between press supporter band The horizontal band section in which at least the part which winds exactly from the shell of a guide peg to the arch of foot of the sole around a longitudinal direction has elasticity, the toe by the side of the shell of said horizontal band section -- the end section connects with a near side -- having -- the other end -- a toe -- between -- a passage -- the toe on the guide-peg background of said horizontal band section -- the toe connected with a near side -- it has the between loop-formation section and the connection band section by which a point side is connected with said horizontal band section, and a posterior part side is hung on the heel posterior part of a guide peg.

[0012] moreover, other guide pegs of this invention and a toe -- a between press supporter band the toe by the side of a shell -- from this side to ankle this side with the wrap shell side covering section in the shape of about 3 square shapes the toe on a guide-peg background -- from this side to heel this side with the wrap guide-peg background covering section in the shape of about 3 square shapes it connects at the tip of said shell side covering section and the guide-peg background covering section -- having -- a toe -- the toe passing through between -- it has the between loop-formation section and the connection band section which is connected with the posterior part side of said shell side covering section and the guide-peg background covering section, and is hung on a heel posterior part.

[0013] [Embodiment of the Invention] Drawing 1 and drawing 2 are drawings explaining the press supporter band of the 1st operation gestalt of this invention, and the top view of the press supporter band which equipped the guide peg with drawing 1 , and drawing 2 are the rear-face Figs. of the press supporter band with which the guide peg was equipped. [0014] In these drawings the press supporter band 10 of a **** 1 operation gestalt The shell side band section 11 wound around the shell 2 side of a guide peg from heel 1 posterior part of a guide peg, and the guide-peg background band section 12 wound around the background of a guide peg from heel 1 posterior part of a guide peg, the end section connects with the shell side band section 11 -- having -- the other end -- between toes 3 -- a passage -- the toe of the guide-peg background band section 12 -- the toe connected with three near side -- it consists of the between loop-formation sections 13.

[0015] at least the whole or a part forms the shell side band section 11 in the shape of a ring from the band form which has elasticity -- having -- the toe on the side front of heel 1 posterior part of a guide peg to a guide peg -- shell 2 part of three this side -- a passage -- exactly -- winding -- having -- a thing -- it is . Cotton, hemp with which such the shell side band section 11 has antibacterial and hygroscopicity, As it is desirable to be formed from the fiber which compound-ized natural fibers, such as silk and wool, or these natural fibers, and chemical fibers, such as nylon, polyester, polyurethane, and acetate, for example, it is shown in drawing 3 You may make it the configuration which pasted up 2nd cloth 11b in which the irregularity which contacts one front face of 1st cloth 11a on the surface of a guide peg, and gives a moderate stimulus to it was formed. You may make it the elasticity of the shell side band section 11 contact on foot the stitch 11c front face which may also weave rubber into the band made of cloth as well as a common supporter, receives permeability while making elasticity and resiliency rich as shown in Fig. 4, and has irregularity. Although the shell side band section 11 may be formed thin as a whole so that it may wear under socks, shoes may be worn and walk and movement can be performed, it is formed in thick, gives a heat insulation effect, and may enable it to wear it indoors in winter etc. Moreover, although regularity is sufficient as the width of face, the shell side band section 11 may make width of face large, may narrow a tip side so that it may not separate from the part wound around heel 1

posterior part, and may enable it for a surface fastener etc. to adjust ring-like magnitude according to the magnitude of a guide peg.

[0016] at least the whole or a part forms the guide-peg background band section 12 in the shape of a ring from the band form which has elasticity -- having -- the toe on the background of heel 1 posterior part of a guide peg to a guide peg -- 3 this side parts -- a passage -- exactly -- winding -- having -- a thing -- it is . Such the guide-peg background band section 12 is formed from the same various fiber as the above-mentioned shell side band section 11, the same elasticity, resiliency, permeability, antibacterial, hygroscopicity, and its thing that has surface irregularity are desirable, and it is desirable thin or that width of face is also made to arbitration in thick, and ring-like magnitude can also be adjusted according to the magnitude of a guide peg. In addition, as shown in drawing 5 , crossover ****, the shell side band section 11, and the guide-peg background band section 12 are constituted for the band form of one big ring-like band from a center section, you may make it make a part for the intersection wind around the heel 1, and the configuration of the band section can be simplified by doing in this way. Moreover, it can be made still thinner if a part for an intersection is used as one connection band.

[0017] The between loop-formation section 13 is formed in the shape of a ring with the thin string of a circular cross section or a rectangle cross section etc. a toe -- For example, the end section is connected with the near side of the toe 3 of the shell side band section 11 movable in the location of **** 4 which is the end crater of a guide peg. It is connected in the location of a spring 5 whose other end is the end crater of the guide peg of the near side of the toe 3 of the guide-peg background band section 12, two string parts of pars intermedia are mixed, and it is between toes 3 (with this operation gestalt). It passes along between 3b the 2nd toe with 3a the 1st toe, and is pulled by the elasticity of the shell side band section 11 and the guide-peg background band section 12 by proper strength. such a toe -- the between loop-formation section 13 is formed in the shape of [small] a ring with the string-like object which consists of various kinds of above-mentioned fiber which has antibacterial and hygroscopicity. As shown in drawing 6 , as for the magnitude of the shape of this ring, it is desirable that adjustment has become possible according to magnitude, hauling force, etc. of a guide peg with the surface fastener 14 formed in a string's both-ends side. moreover, a toe -- the part which consists of a cylinder-like string and passes along between toes 3 as the between loop-formation section 13 is shown in drawing 7 and drawing 8 -- hollow -- comparatively -- resiliency -- As the tube-like object 15 which has antibacterial and permeability is contained, and it is put between toes 3 or it is shown in drawing 9 The part passing through between toes 3 is equipped with tube-like object 15' which both ends become from the same ingredient formed a little in the shape of diameter expansion comparatively small movable, and it is put between it between toes 3. moreover, the toe of other gestalten -- between loop-formation section 13A is formed in some center sections of the band form from the ingredient which contained the core 16 which has resiliency, and you may make it between toes 3 open it suitably by the core 16, as shown in drawing 10 furthermore, the toe of other gestalten -- between loop-formation section 13B is formed in a front face at the band form which has irregularity, and you may make it stimulate between toes 3 with irregularity, as shown in drawing 11 moreover, a toe -- the between loop-formation section 13 forms a string in a small ring, and if a ring is connected with a toe and a through string is connected with the band section, it can make him thin.

[0018] According to the press supporter band 10 of the above-mentioned configuration, first, in order to equip The posterior part side of the shell side band section 11 is hung on heel 1 posterior part. A tip side to the shell side near a toe 3 Winding, The posterior part side of the guide-peg background band section 12 is hung on the posterior part of the heel 1. A tip side on the guide-peg background near a toe 3 Winding, the shell side band section 11 and the guide-peg background band section 12 are exactly contacted on the surface of a guide peg -- making -- and a toe -- two string parts of the between loop-formation section 13 -- together -- carrying out -- 1st toe 3a -- and it gives and lets the moderate hauling force pass among 3b the 2nd toe.

[0019] If this press supporter band 10 is worn and walked, since the shell side band section 11 and the guide-peg background band section 12 expand and contract moderately in each part of the heel 1, a shell 2, and the sole, the acupressure effectiveness and the massage effectiveness obtain on whole foot -- having -- a toe -- the effectiveness that the between loop-formation section 13 uses acupressure between toes 3 and the root circumference of a toe without sense of incongruity 1st toe 3a and since it expands and contracts moderately among 3b the 2nd toe is acquired. If irregularity is especially formed in the front face of the band section or the loop-formation section, a stimulus will be suitably given for the front face of a guide peg. a toe -- 1st toe 3a and letting it pass and inserting among 3b, the 2nd toe, will achieve the same duty as the conventional wooden clogs or the clog thong of Japanese sandals for the between loop-formation section 13. especially -- this operation gestalt -- the shell side band section 11 and the guide-peg background band section 12, and a toe -- since it is located in **** 4 and the spring 5 whose joining segment of the between loop-formation section 13 is the end crater of a guide peg, a stimulus moderate in an end crater and the press

effectiveness are acquired according to a flexible operation. moreover, a toe -- by 1st toe 3a and making between 3b open the 2nd toe, it is good for health and hygroscopicity and permeability become good, it can be made to be able to dry and the between loop-formation section 13 can perform deodorization and athlete's foot prevention efficiently. The small tube-like object 15 in the air which has resiliency comparatively is contained in the between loop-formation section 13. especially -- a toe -- It equips with tube-like object 15' in which both ends were formed in the shape of diameter expansion comparatively small [between toes 3] in putting the tube-like object 15 between toes 3. Put the tube-like object 15' between toes 3, or further a toe -- if the core 16 which has resiliency in the center section like between loop-formation section 13A is contained and the core 16 is put between toes 3, between toes 3 can open suitably, can improve permeability further, and is effective also in prevention and the therapy of hallux valgus. It is possible to always wear, if this press supporter band 10 is formed thin as a whole, and since it can wear indoors as it is and the whole guide peg is supported if effectiveness, such as health recovery, maintenance, and improvement, can be expected from the inside of unconscious in the time of employment or study etc., it forms in thick at the time of movement at the time of a walk and a heat insulation effect is given, it can walk smoothly and blood circulation is improved, and it is good also for correction of a posture. Furthermore, if the press supporter band 10 is worn, the muscular power of the vola can be given by the elasticity, and a liver function and many built-in functions can be raised.

[0020] Drawing 12 and drawing 13 are drawings explaining other use gestalten of the press supporter band of the 1st operation gestalt of this invention, and the top view of the press supporter band which equipped the guide peg with drawing 12 , and drawing 13 are the rear-face Figs. of the press supporter band with which the guide peg was equipped.

[0021] this use gestalt -- a toe -- it is between 3b, and 3b and the thing which let between 3c pass the 3rd toe the 2nd toe the 2nd toe with 3a the 1st toe about the string of the shape of a ring of the between loop-formation section 13, and other configurations are the same as that of the 1st operation gestalt. this toe -- by the between loop-formation section 13, between Toes 3a, 3b, and 3c is opened suitably, it is good for health and hygroscopicity and permeability become good, it can be made to be able to dry, deodorization and athlete's foot prevention can be performed efficiently, and prevention and the therapy of hallux valgus can be carried out.

[0022] Drawing 14 and drawing 15 are drawings explaining the press supporter band of the 2nd operation gestalt of this invention, and the top view of the press supporter band which equipped the guide peg with drawing 14 , and drawing 15 are the rear-face Figs. of the press supporter band with which the guide peg was equipped.

[0023] two toes which the press supporter band 20 of this 2nd operation gestalt is connected with the shell side band section 11 and the guide-peg background band section 12, and pass along between toes 3 -- it has the between loop-formation section 13 and 13', and other configurations are the same as that of the 1st operation gestalt. one toe -- the between loop-formation section 13 -- two string parts -- together -- carrying out -- the 1st toe -- 3a and the 2nd toe -- between 3b -- the toe of through and another side -- between loop-formation section 13' -- the 2nd toe -- 3b and the 3rd toe -- between 3c -- and it is letting between 3c and the 3d of the 4th toe pass the 3rd toe. a toe -- the between loop-formation section 13 and 13' -- the 1st toe -- 3a, 2nd toe 3b, and the 2nd toe -- 3b and 3rd toe 3c -- between 3c and the 3d of the 4th toe is opened suitably the 3rd toe, it is good for health and hygroscopicity and permeability become good, it can be made to be able to dry and deodorization and athlete's foot prevention can be performed efficiently.

[0024] Drawing 16 and drawing 17 are drawings explaining other use gestalten of the press supporter band of the 2nd operation gestalt of this invention, and the top view of the press supporter band which equipped the guide peg with drawing 16 , and drawing 17 are the rear-face Figs. of the press supporter band with which the guide peg was equipped.

[0025] this use gestalt -- a toe -- it is 3a and the thing which let between 3c and the 3d of the 4th toe pass with 3b, and let between 3e pass for the string of the shape of the between loop-formation section 13 and a ring of 13' the 5th toe with the 3d of the 4th toe the 3rd toe between 3c the 3rd toe the 2nd toe between 3b the 2nd toe the 1st toe, and other configurations are the same as that of the 2nd operation gestalt. a toe -- by the between loop-formation section 13 and 13', between all the toes 3a, 3b, 3c, 3d, and 3e is opened suitably, it is good for health and hygroscopicity and permeability become good, it can be made to be able to dry and deodorization and athlete's foot prevention can be performed efficiently. namely, -- the press supporter band 20 of the 2nd operation gestalt -- two toes -- it can choose and let between toes 3 pass by making a string part into one or doubling it by the between loop-formation section 13 and 13' being prepared if needed. although a burden may be especially applied to the part at the tip of a guide peg like female high-heeled shoe or between the 3rd toe to the 5th toe may overlap little by little by wear of previous thin shoes -- a toe -- the preventive effect is expectable by letting the between loop formation 13 and 13' pass. in addition, a toe -- it can let the between loop formations 13 and 13 pass between the arbitration of a toe 3.

[0026] the press supporter band 20 of the 2nd operation gestalt is shown in drawing 18 and drawing 19 -- as -- a toe -- if a magnetic small piece or snap 21 grade is prepared and the between loop-formation section 13 and 13' are connected or sewn on by **** 4 and about five spring of a guide peg, circulation can be improved for **** 4 and a spring 5 by magnetic action or proper stimulus. Moreover, similarly, in the press supporter band 20 of the 2nd operation gestalt, as shown in drawing 20 and drawing 21 the tip side of the shell side band section 11 and the guide-peg background band section 12 -- **** 4 and the near spring 5 -- the shape of a ring -- forming -- this ring part -- a toe, if it lets the between loop-formation section 13 and 13' pass a toe [from / near **** 4 and the spring 5] -- thrust can be heightened, without the between loop-formation section 13 and 13' shifting.

[0027] moreover, the press supporter band 20 of the 2nd operation gestalt is shown in drawing 22 -- as -- a toe -- the small height 22 is formed in the location the between loop-formation section 13 and near the root of the toe of 13'. This height 22 consists of an ingredient which has resiliency, flexibility, and hygroscopicity, and it lets a ring-like thing pass or it is prepared by pasting up or sewing on what was formed in convex. The end crater of the root of a toe is stimulated by such height 22, and there is especially effectiveness in fatigue of an eye etc.

[0028] Drawing 23 and drawing 24 are the press supporter bands of the 3rd operation gestalt of this invention, and the rear-face Fig. of the press supporter band which equipped the guide peg with drawing 23 , and drawing 24 are the expanded sectional views of a height. In addition, the part corresponding to said operation gestalt describes the same sign (the following operation gestalten are also made the same).

[0029] the press supporter band 30 of this 3rd operation gestalt -- the guide-peg background band section 12 and a toe - a height 31 is formed in the location of the arch of foot 6 of an about five spring [of the between loop-formation section 13] joining segment, and the guide peg of the guide-peg background band section 12, and other configurations are the same as that of the 1st operation gestalt. This height 31 pastes up or sews the cloth 32 of the letter of piloerection which can put a fastener on the front face of the guide-peg background band section 12 of the side which contacts on the surface of a guide peg, and puts the projection 34 which pasted up the surface fastener 33 on this cloth 32. Ingredients with which such a projection 34 has resiliency, antibacterial, and hygroscopicity, such as cloth and rubber, are used.

[0030] According to the press supporter band 30 of the above-mentioned configuration, since the height 31 is formed in the about six arch of foot of a spring 5 or a guide peg, the end crater of a guide peg can be stimulated effectively, and it can be used free [attachment and detachment] with a surface fastener 33, and height adjustment is further possible with Projections 38a and 38b.

[0031] Drawing 25 , drawing 26 , and drawing 27 explain other examples of the height of the press supporter band of the 3rd operation gestalt. As for the height 35 shown in drawing 25 , the projection 36 with which the center section was formed in the shape of a step is attached in the skin side front face of the guide-peg background band section 12 through cloth 32 by the surface fastener 33. The end crater of a guide peg can be effectively stimulated with this projection 36. Moreover, the height 37 shown in drawing 26 is attached on the projection 36 of drawing 25 free [attachment and detachment of projection 38a in which irregularity was formed on the front face]. The end crater of a guide peg can be chosen by this projection 38a, and it can stimulate effectively. The height 39 shown in drawing 27 is attached on the projection 36 of drawing 25 free [attachment and detachment of projection 38b in which irregularity was formed on the front face]. The end crater of a guide peg can be chosen by this projection 38b, and it can stimulate effectively.

[0032] Drawing 28 is a perspective view explaining the condition of having equipped the guide peg with the press supporter band of the 4th operation gestalt of this invention.

[0033] This press supporter band 40 attaches the thin and soft height 42 in the front face of the side in contact with a guide peg while enabling it for a surface fastener 41 to adjust longitudinally the same band section 11 as the 1st operation gestalt.

[0034] In this press supporter band 40, since a surface fastener 41 can adjust the shell side band section 11 longitudinally, wearing becomes easy and the end crater by the side of the shell 2 of a guide peg can be effectively stimulated by the height 42.

[0035] Drawing 29 is a top view in the condition of having equipped the guide peg with the press supporter band of the 5th operation gestalt of this invention.

[0036] the line magnetized by the front face of the side in contact with the guide peg of the band section 11 as the 1st operation gestalt with this same press supporter band 50 -- the body 51 is established.

[0037] the line magnetized in this press supporter band 50 -- circulation of the guide peg by the side of a shell can be improved according to the magnetic effect of the body 51.

[0038] Drawing 30 is a top view in the condition of having equipped the guide peg with the press supporter band of the

6th operation gestalt of this invention.

[0039] the ball-race-like cloth 61 attaches this press supporter band 60 in an edge at the same band section 11 as the 1st operation gestalt -- having -- further -- a toe -- a ribbon 62 is attached in a connection section side with the between loop-formation section 13. As for this ball-race-like cloth 61 and ribbon 62, it is desirable to give fashionability as an object for women and to also make color variegated. You may make it give change to the weave of the band section itself, or the pattern of a way to knit instead of attaching this ball-race-like cloth 62.

[0040] In this press supporter band 60, since the ball-race cloth 61 and the ribbon 62 are formed, it can also wear indoors as it is as a fashionability **** thing for women.

[0041] Drawing 31 and drawing 32 are the press supporter bands of the 7th operation gestalt of this invention, and the top view of the press supporter band which equipped the guide peg with drawing 31 , and drawing 32 are the rear-face Figs. of the press supporter band with which the guide peg was equipped.

[0042] This press supporter band 70 forms the connection band 71 which is what wound the perimeter beside a guide peg for the same shell side band section 11 as the 1st operation gestalt, therefore connected two places of the shell side band section 11 with the before [the sole] side in the longitudinal direction.

[0043] In this press supporter band 70, when it wore and equips with high-heeled shoe by making the perimeter beside a guide peg wind the shell side band section 11, the shell side band section 11 can be prevented from being visible from an appearance, and the guide peg of that near can be stimulated, and wearing is ensured because the connection bands 71 increase in number.

[0044] Drawing 33 and drawing 34 are the press supporter bands of the 8th operation gestalt of this invention, and the top view of the press supporter band which equipped the guide peg with drawing 33 , and drawing 34 are the rear-face Figs. of a press supporter with which the guide peg was equipped.

[0045] the toe by the side of the shell 2 of the horizontal band section 81 which has the elasticity by which this press supporter band 80 winds the arch of foot 6 of the sole around a longitudinal direction exactly from the shell 2 of a guide peg, and this horizontal band section 81 -- the end section connects with three near side movable -- having -- the other end -- between toes 3 -- a passage -- the toe on the guide-peg background of the horizontal band section 81 -- the toe connected with three near side -- it consists of the between loop-formation sections 82. the horizontal band section 81 is formed with the same ingredients of various kinds of as the band section explained with said each operation gestalt -- having -- a toe -- the between loop-formation section 82 is also formed with the same ingredient, and irregularity and a height are formed suitably, respectively. and a toe -- the between loop-formation section 82 -- the 1st toe -- 3a and 2nd toe 3b -- and it lets it pass among 3c the 3rd toe with 3b the 2nd toe. In addition, as shown in drawing 35 , the horizontal band section 81 may form a surface fastener 83, and adjustment of it may be attained according to the magnitude of a guide peg. Moreover, you may make it wind the horizontal band section 81 around a duplex in a longitudinal direction so that it may not separate.

[0046] this press supporter band 80 -- the horizontal band section 81 and a toe -- while being able to act similarly with the between loop formation section 82 having explain above , being able to press the part which need the whole guide peg , being able to give the moderate acupressure effectiveness and being able to aim at recovery of health , maintenance , and improvement , permeability be good and prevention of a deed athlete's foot and a therapy perform moisture absorption and deodorization efficiently , and even if wearing be trustworthy and wear shoes , it can use for a long time . moreover -- this operation gestalt -- the horizontal band section 81 and a toe -- since it consists of the between loop-formation sections 82, structure can be easy, it can manufacture easily and wearing also becomes easy.

[0047] Drawing 36 is the top view of the press supporter band with which the guide peg of the 9th operation gestalt of this invention was equipped.

[0048] the insertion sections 81a and 81a of the shape of two crevice form this press supporter band 90 in this side by the side of the shell of the horizontal band section 81 -- having -- these insertion sections 81a and 81a -- respectively -- a toe -- the between loop-formation section 82 and 82' are hung, and it is connected in the horizontal band section 81 by the sole through between Toes 3a, 3b, 3c, and 3d and 3e.

[0049] and also it acts like said each operation gestalt in this press supporter band 90 -- a toe -- since the between loop-formation section 82 and 82' are hung on the insertion sections 81a and 81a of the two shape of a crevice of the horizontal band section 81, it is lost that a location decides and shifts.

[0050] in addition, the press supporter band 90 of the 9th operation gestalt is shown in drawing 37 -- as -- instead of [of the crevice-like insertion sections 81a and 81a] -- the shell side of the horizontal band section 81 -- the slit-like insertion sections 81b and 81b -- forming -- these insertion sections 81b and 81b -- respectively -- a toe -- you may make it hang the between loop-formation section 82 and 82'

[0051] Drawing 38 is the perspective view of the press supporter band with which the guide peg of the 10th operation

gestalt of this invention was equipped.

[0052] the horizontal band section 81 in which this press supporter band 100 was formed like the 9th operation gestalt, and a toe -- a posterior part side is further wound around the posterior part side of the heel 1, and the connection band section 101 from which the edge by the side of anterior part was connected with the horizontal band section 81 by attaching by sewing etc. in the upper part of a shell 2 is formed in the between loop-formation section 82.

[0053] In this press supporter band 100, since the connection band section 101 is formed, wearing becoming certain and separating is lost.

[0054] Drawing 39 and drawing 40 are the press supporter bands of the 11th operation gestalt of this invention, and the top view of the press supporter band which equipped the guide peg with drawing 39, and drawing 40 are the rear-face Figs. of the press supporter band with which the guide peg was equipped.

[0055] this press supporter band 110 -- the toe by the side of the shell of a guide peg -- with the shell side covering section 111 which formed exactly from this side to ankle this side according to the configuration of a guide peg in the shape of wrap about 3 square shapes the toe of the sole -- with the guide-peg background covering section 112 which formed exactly from this side to heel this side in the shape of wrap about 3 square shapes the toe which is connected with the point of the shell side covering section 111, and the point of the guide-peg background covering section 112, and passes along between toes 3 -- with the between loop-formation section 113 It connects with the back end sections (left and right) of the shell side covering section 111 and the guide-peg background covering section 112, and consists of the connection band sections 114 around which the posterior part of the heel 1 of a guide peg is wound. As for the shell side covering section 111 and the guide-peg background covering section 112, it is desirable that consist of an ingredient which the resiliency, antibacterial, and flexibility which a configuration is maintained to some extent have, and permeability forms with the ingredient of the shape of a good mesh. a toe -- the between loop-formation section 113 and the connection band section 114 are similarly formed with the ingredient explained with the above-mentioned operation gestalt. moreover, a toe -- two or more between loop-formation sections 113 may be formed so that it may let it pass between toes 3, and you may make it let them pass among two or more toes 3 with one string Furthermore, irregularity and a height are suitably formed in the inside of the shell side covering section 111 and the guide-peg background covering section 112, the front face and end crater of a guide peg are stimulated, or the acupressure effectiveness is acquired.

[0056] While being able to act like each above-mentioned operation gestalt in this press supporter band 110, being able to press a part [place required / the whole guide peg], being able to give the moderate acupressure effectiveness and being able to aim at recovery of health, maintenance, and improvement, permeability is good and prevention of deed athlete's foot and a therapy can perform moisture absorption and deodorization efficiently, and even if wearing is trustworthy and it wears shoes, it can be use for a long time. Moreover, with this operation gestalt, since a guide peg is covered in the shell side covering section 111 and the guide-peg background covering section 112 and it is connected in the connection band section 114, wearing being trustworthy and separating is lost.

[0057] Although the suitable operation gestalt of this invention was explained, of course, various amelioration and modification can be made within limits which do not deviate from the pneuma of this invention.

[0058]

[Effect of the Invention] it explained above -- as -- the guide peg of this invention, and a toe -- according to the press supporter band of a between -- the need for the whole guide peg, while being able to press a place part, being able to give the moderate acupressure effectiveness and being able to aim at recovery of health, maintenance, and improvement Even if permeability is good, and prevention of deed athlete's foot and a therapy can perform moisture absorption and deodorization efficiently, and it is effective in prevention and the therapy of hallux valgus, wearing is trustworthy and it wears shoes, long duration use can be carried out, and structure can be easy to manufacture and can manufacture easily.

[Translation done.]

* NOTICES *

JPO and INPIT are not responsible for any damages caused by the use of this translation.

- 1.This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.**** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

- [Drawing 1] It is a top view in the condition of having equipped the guide peg of the press supporter band of the 1st operation gestalt of this invention.
- [Drawing 2] It is a rear-face Fig. in the condition of having equipped the guide peg of the press supporter band of the 1st operation gestalt of this invention.
- [Drawing 3] It is the sectional view of the shell side band section of the 1st operation gestalt of this invention.
- [Drawing 4] It is drawing showing the stitch of the shell side band section of the 1st operation gestalt of this invention.
- [Drawing 5] It is drawing which constituted the shell side band section of the 1st operation gestalt of this invention, and the guide-peg background band section from one band.
- [Drawing 6] the toe of the 1st operation gestalt of this invention -- it is drawing whose adjustment of the between loop-formation section was enabled.
- [Drawing 7] the toe of the 1st operation gestalt of this invention -- it is drawing which contained the tube-like object in the between loop-formation section.
- [Drawing 8] the toe which contained the tube-like object of drawing 7 -- it is the expanded sectional view of the between loop-formation section.
- [Drawing 9] the toe of the 1st operation gestalt of this invention -- it is drawing which prepared the tube-like object in the between loop-formation section.
- [Drawing 10] other toes of the 1st operation gestalt of this invention -- it is the sectional view of the between loop-formation section.
- [Drawing 11] the toe of further others of the 1st operation gestalt of this invention -- it is the sectional view of the between loop-formation section.
- [Drawing 12] It is the top view of other busy conditions with which the guide peg of the press supporter band of the 1st operation gestalt of this invention was equipped.
- [Drawing 13] It is the rear-face Fig. of other busy conditions with which the guide peg of the press supporter band of the 1st operation gestalt of this invention was equipped.
- [Drawing 14] It is a top view in the condition of having equipped the guide peg of the press supporter band of the 2nd operation gestalt of this invention.
- [Drawing 15] It is a rear-face Fig. in the condition of having equipped the guide peg of the press supporter band of the 2nd operation gestalt of this invention.
- [Drawing 16] It is the top view of other busy conditions with which the guide peg of the press supporter band of the 2nd operation gestalt of this invention was equipped.
- [Drawing 17] It is the rear-face Fig. of other busy conditions with which the guide peg of the press supporter band of the 2nd operation gestalt of this invention was equipped.
- [Drawing 18] the toe of the 2nd operation gestalt of this invention -- it is the top view which prepared the snap in the between loop-formation section.
- [Drawing 19] the toe of the 2nd operation gestalt of this invention -- it is the rear-face Fig. which prepared the snap in the between loop-formation section.
- [Drawing 20] It is the top view which prepared the ring in the shell side band section of the 2nd operation gestalt of this invention.
- [Drawing 21] It is the rear-face Fig. which prepared the ring in the guide-peg background band section of the 2nd operation gestalt of this invention.
- [Drawing 22] the toe of the 2nd operation gestalt of this invention -- it is the rear-face Fig. which prepared the height in

the between loop-formation section.

[Drawing 23] It is the rear-face Fig. of other busy conditions with which the guide peg of the press supporter band of the 3rd operation gestalt of this invention was equipped.

[Drawing 24] It is the expanded sectional view of the height of the press supporter band of the 3rd operation gestalt of this invention.

[Drawing 25] It is the expanded sectional view of other heights of the press supporter band of the 3rd operation gestalt of this invention.

[Drawing 26] It is the expanded sectional view of other heights of the press supporter band of the 3rd operation gestalt of this invention.

[Drawing 27] It is the expanded sectional view of other heights of the press supporter band of the 3rd operation gestalt of this invention.

[Drawing 28] It is a perspective view in the condition of having equipped the guide peg of the press supporter band of the 4th operation gestalt of this invention.

[Drawing 29] It is a top view in the condition of having equipped the guide peg of the press supporter band of the 5th operation gestalt of this invention.

[Drawing 30] It is a top view in the condition of having equipped the guide peg of the press supporter band of the 6th operation gestalt of this invention.

[Drawing 31] It is a top view in the condition of having equipped the guide peg of the press supporter band of the 7th operation gestalt of this invention.

[Drawing 32] It is a rear-face Fig. in the condition of having equipped the guide peg of the press supporter band of the 7th operation gestalt of this invention.

[Drawing 33] It is a top view in the condition of having equipped the guide peg of the press supporter band of the 8th operation gestalt of this invention.

[Drawing 34] It is a rear-face Fig. in the condition of having equipped the guide peg of the press supporter band of the 8th operation gestalt of this invention.

[Drawing 35] It is the rear-face Fig. whose adjustment of the horizontal band section of the press supporter band of the 8th operation gestalt of this invention was enabled.

[Drawing 36] It is a top view in the condition of having equipped the guide peg of the press supporter band of the 9th operation gestalt of this invention.

[Drawing 37] It is a top view in the condition of having equipped the guide peg which shows other horizontal bands of the press supporter band of the 9th operation gestalt of this invention.

[Drawing 38] It is a perspective view in the condition of having equipped the guide peg of the press supporter band of the 10th operation gestalt of this invention.

[Drawing 39] It is a top view in the condition of having equipped the guide peg of the press supporter band of the 10th operation gestalt of this invention.

[Drawing 40] It is a rear-face Fig. in the condition of having equipped the guide peg of the press supporter band of the 10th operation gestalt of this invention.

[Description of Notations]

1 Heel

2 Shell

3 Toe

4 ****

5 Spring

6 Arch of Foot

10 Press Supporter Band

11 11' Shell side band section

12 Guide-Peg Background Band Section

13 and 13' a toe -- the between loop-formation section

14 Surface Fastener

15 15' Tube-like object

16 Core

20 Press Supporter Band

21 Snap

22 Height

- 30 Press Supporter Band
- 31, 35, 37, 39 Height
- 32 Cloth
- 33 Surface Fastener
- 34, 36, 38a, 38b Projection
- 40 Press Supporter Band
- 41 Surface Fastener
- 42 Height
- 50 Press Supporter Band
- 51 Line -- Body
- 60 Press Supporter Band
- 61 Ball-Race-like Cloth
- 62 Ribbon
- 70 Press Supporter Band
- 71 Connection Band
- 80 Press Supporter Band
- 81 Horizontal Band Section
- 81a, 81b Insertion section
- 82 and 82' a toe -- the loop-formation section
- 83 Surface Fastener
- 90 Press Supporter Band
- 100 Press Supporter Band
- 101 Connection Band Section
- 110 Press Supporter Band
- 111 Shell Side Covering Section
- 112 Guide-Peg Background Covering Section
- 113 Toe -- between Loop-Formation Section
- 114 Connection Band Section

[Translation done.]

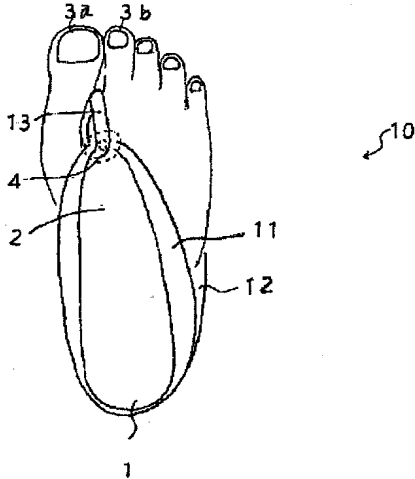
* NOTICES *

JPO and INPIT are not responsible for any damages caused by the use of this translation.

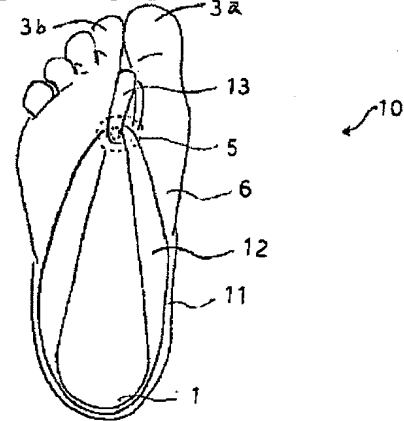
- 1.This document has been translated by computer. So the translation may not reflect the original precisely.
- 2.**** shows the word which can not be translated.
- 3.In the drawings, any words are not translated.

DRAWINGS

[Drawing 1]



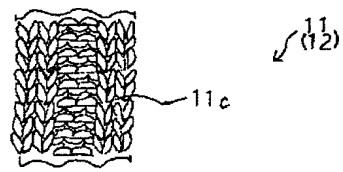
[Drawing 2]



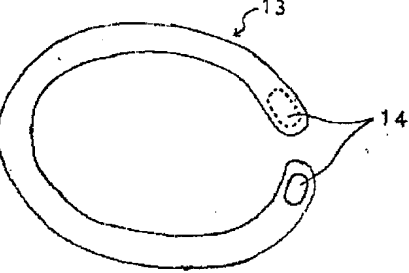
[Drawing 3]



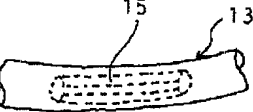
[Drawing 4]



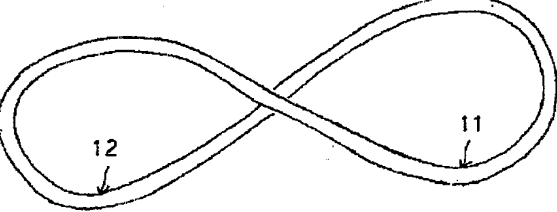
[Drawing 6]



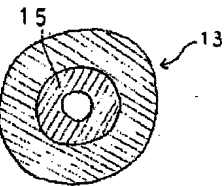
[Drawing 7]



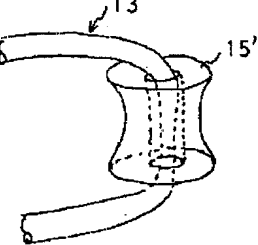
[Drawing 5]



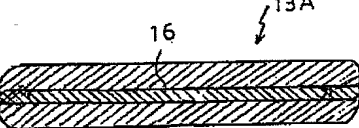
[Drawing 8]



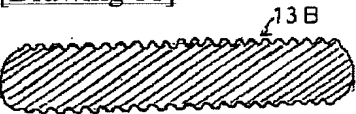
[Drawing 9]



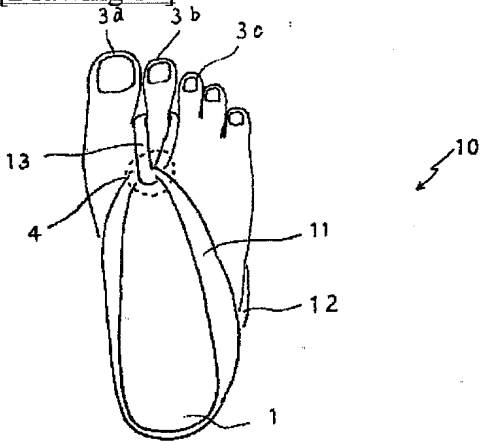
[Drawing 10]



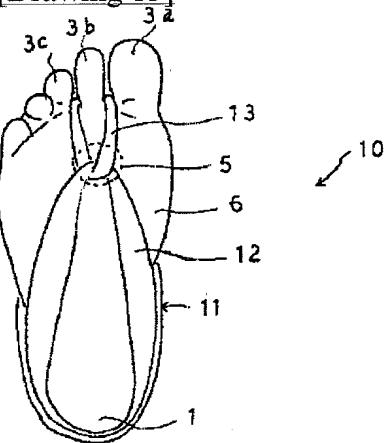
[Drawing 11]



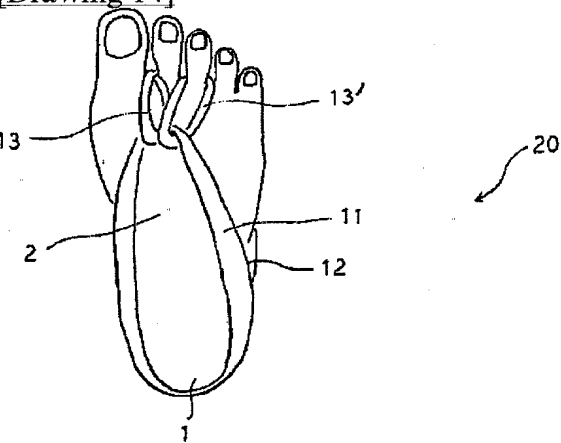
[Drawing 12]



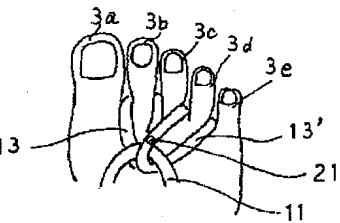
[Drawing 13]



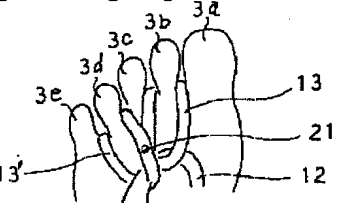
[Drawing 14]



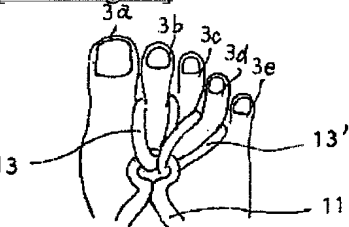
[Drawing 18]



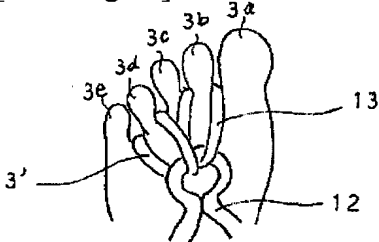
[Drawing 19]



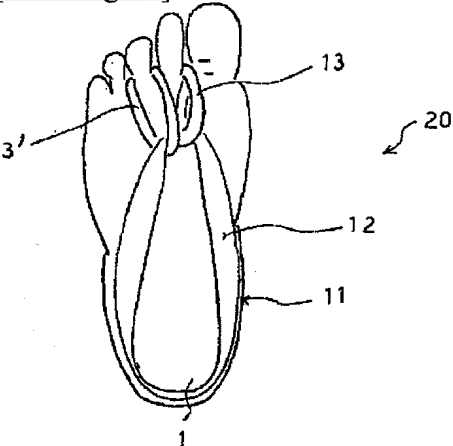
[Drawing 20]



[Drawing 21]

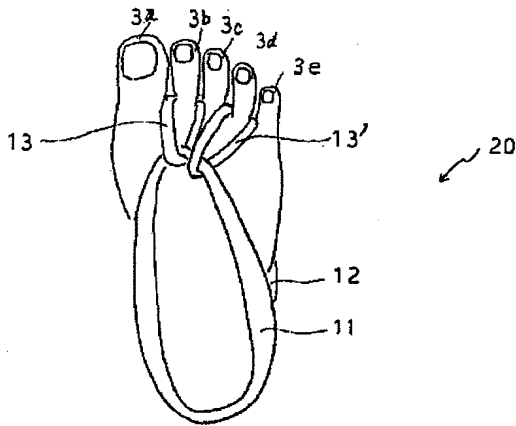


[Drawing 15]

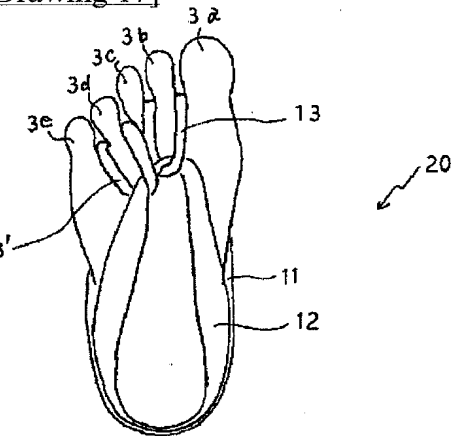


[Drawing 16]

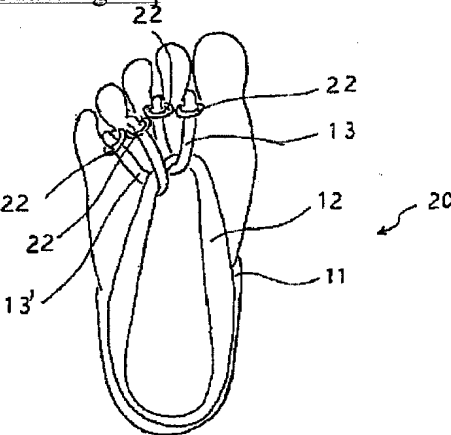




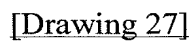
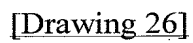
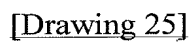
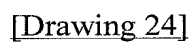
[Drawing 17]

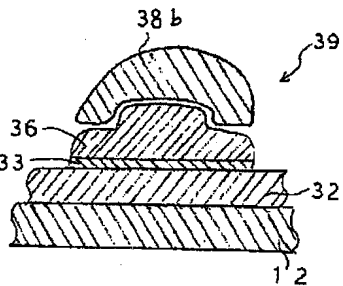


[Drawing 22]

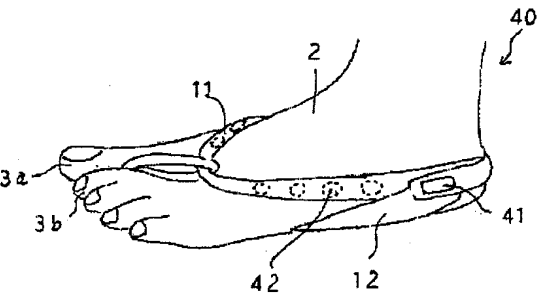


[Drawing 23]

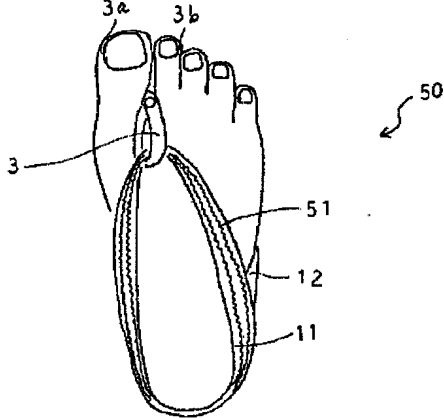




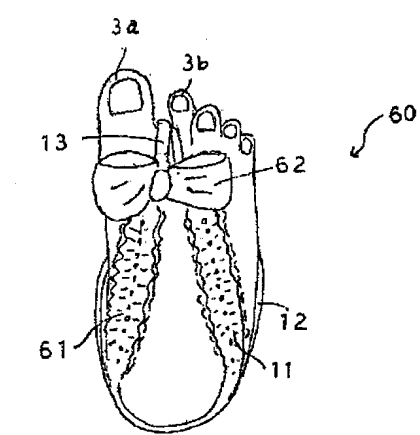
[Drawing 28]



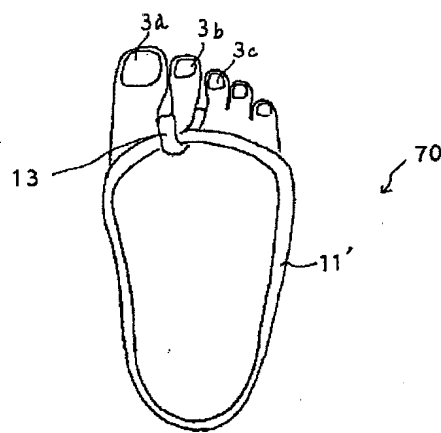
[Drawing 29]



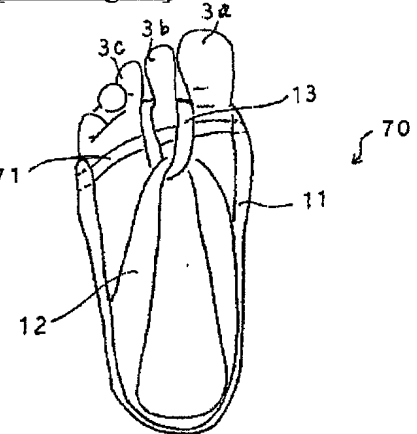
[Drawing 30]



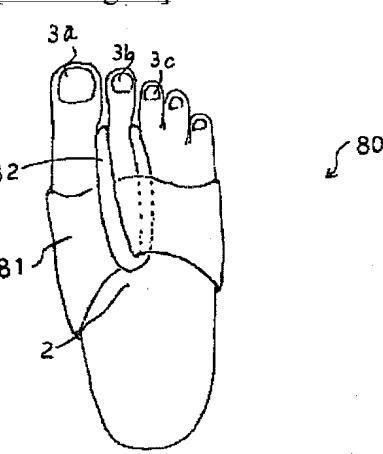
[Drawing 31]



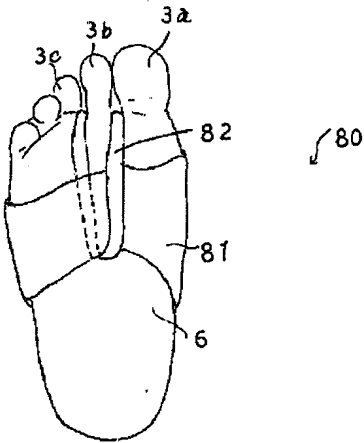
[Drawing 32]



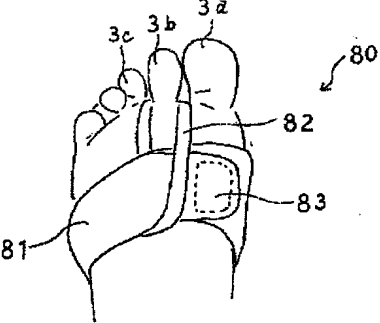
[Drawing 33]



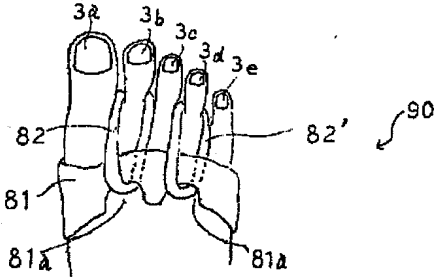
[Drawing 34]



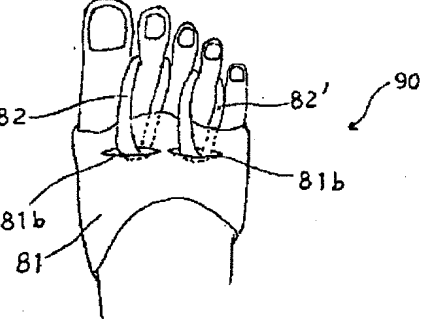
[Drawing 35]



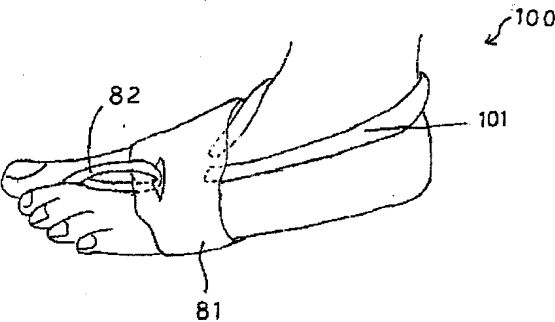
[Drawing 36]



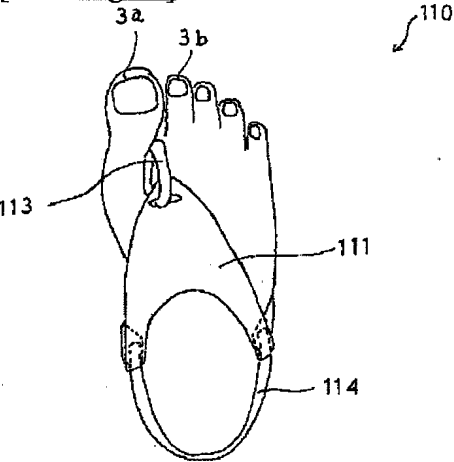
[Drawing 37]



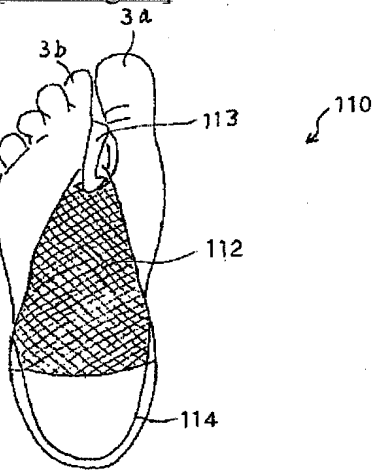
[Drawing 38]



[Drawing 39]



[Drawing 40]



[Translation done.]